



Somerset County Council

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# REPORT

OF THE

## MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1928.

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County Medical Officer of Health.



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**To the Chairman and Members of the Public Health and Housing Committee,  
Somerset County Council.**

.....

GENTLEMEN,

I beg to submit my twentieth Annual Report upon the Health and Sanitary Administration of the County. The Ministry of Health has arranged to supply the mortality statistics to each Medical Officer to save separate compilation, and these figures have been adopted in the Tables.

The vital statistics are satisfactory with a very low death rate and the lowest rate of infantile mortality on record. The tuberculosis death rate is slightly above the very low rates of the previous two years but is again very low.

The Report is, for the most part, a record of steady progress along well attested lines, and shows what a very important part the County Council now plays in Public Health activities in the County. With the passing of the Local Government Act, 1929, and the added powers and duties given to County Councils, this will be greatly extended.

A large part of my Report is now taken up with details of the Health work undertaken by the County Health Department but a brief survey is also given of the general sanitary conditions in the County.

Your obedient servant,

Weston-super-Mare,

W. G. SAVAGE.

*June, 1929.*



## SECTION I.

**GENERAL AND VITAL STATISTICS.**

Population (1928) 405,250.

Births :—Total 5,951 ; Legitimate, 5,709 ; Illegitimate, 242.

Deaths :—Total 4,812 ; Urban, 2,058 ; Rural, 2,754.

Deaths of children under 1 year of age, 269.

Rateable Value, £2,715,970.

Sum represented by a penny rate :—£10,359 12s. 7d.

Birth rate, 14.68.

Death rate, 11.87.

Rate of infantile mortality, 45.20.

Percentage of births which were illegitimate, 4.1.

The birth-rate is again very low, but is slightly above the rate for last year.

The death returns are corrected as regards the distribution of deaths to the districts to which they properly belong. To correct for differences of age and sex distribution a standardizing factor has to be used. Factors have been obtained, based upon the last census figures. So corrected the following figures are obtained.

	Net Death-rate.	Standardizing Factor.	Standardized Death-rate.
Rural Districts	11.70	0.772	9.03
Urban Districts	12.12	0.827	10.02
Administrative County	11.87	0.795	9.44
England and Wales	11.7	—	11.7

The death-rate is one of the lowest on record in the County, corresponding to the low rate for England and Wales. There being so many old persons in the County, the Standardized death-rate figure is the fairer measure of any death-rate and this is the second lowest we have had in the County the only one lower being the 9.21 of 1926.

The causes of death are set out in Tables A. and B. at the end of the Report. Table B. shows that heart diseases are responsible for the largest number of deaths from one single group of causes (875 deaths), cancer and other forms of malignant disease the next largest (674 deaths), bronchitis and pneumonia caused 410 deaths, while tuberculosis caused 305 deaths. Cancer still continues to increase. It chiefly affects those beyond middle life. Only 50 of the deaths were in persons under 45 years, 251 were between 45 and 65 and 373 were over 65 years when they died. At present all that can be done along Public Health lines is to disseminate sound advice as to the need for early recognition and treatment of cancer. In this way a good many lives can be saved.

In Somerset there are many old persons and the importance of correcting for this is shown very markedly in the statistics. The standardizing factor mentioned above corrects this and makes the death rate comparable with England and Wales. It will be noted that the uncorrected rate this year is very slightly higher than for England and Wales but when the large number of old persons is taken into account it is very greatly below.

As pointed out in previous years, we cannot hope to lower the death rate further to any great extent but must aim at a postponement of the period of death. Table I shows that this is still taking place.

TABLE I.  
Proportion of the deaths in each year divided amongst the different age groups.

	Under 1 year.	1—45.	45—65.	65 and over.
1911	12.9	21.0	20.8	45.3
1912	10.6	21.0	23.0	45.4
1913	10.8	23.3	21.0	44.9
1914	9.2	22.0	22.3	46.5
1920	9.7	19.1	22.3	48.9
1921	9.3	18.0	23.1	49.6
1922	6.6	17.3	22.2	53.9
1923	7.0	18.7	23.1	51.2
1924	7.1	17.5	21.8	53.6
1925	6.5	17.0	22.2	54.3
1926	6.9	16.0	22.3	54.8
1927	5.3	15.3	23.5	55.9
1928	5.6	16.6	23.2	54.6

TABLE II.

**Rural Districts.**

YEAR.	Population estimated to middle of each Year.	BIRTHS.		DEATHS UNDER ONE YEAR OF AGE.		DEATHS AT ALL AGES. TOTAL.	
		Number.	Rate.	Number.	Rate per 1,000 Births registered.	Number	Rate.
1918	198,808	3,270	14.68	190	58.10	3,041	15.30
1919	206,946	3,480	16.14	224	64.37	2,963	14.32
1920	215,192	4,943	22.97	271	54.82	2,669	12.40
1921	225,074	4,451	19.78	252	56.62	2,594	11.53
1922	225,651	4,198	18.60	197	46.93	3,008	13.33
1923	227,600	4,170	18.32	195	46.76	2,602	11.43
1924	231,200	3,907	16.89	201	51.45	2,820	12.20
1925	231,100	3,735	16.16	183	49.0	2,802	12.12
1926	231,700	3,654	15.77	180	49.26	2,728	11.77
1927	233,000	3,507	15.05	165	47.04	2,891	12.41
Averages for years 1918—1927	222,627	3,932	17.7	206	52.3	2,812	12.6
1928	235,440	3,615	15.35	155	42.88	2,754	11.70

**Urban Districts.**

1918	143,374	2,181	13.58	134	61.44	2,294	16.00
1919	151,273	2,212	14.04	152	68.72	2,082	13.76
1920	157,301	3,320	21.07	178	53.61	1,960	12.46
1921	162,025	3,055	18.86	168	54.99	1,906	11.76
1922	163,495	2,740	16.76	137	50.00	2,078	12.71
1923	164,700	2,651	16.10	118	44.51	1,852	11.24
1924	167,100	2,597	15.54	149	57.37	2,066	12.32
1925	166,900	2,436	14.60	133	54.60	2,045	12.25
1926	167,800	2,423	14.44	137	56.54	1,902	11.33
1927	168,500	2,262	13.42	100	44.21	2,110	12.52
Averages for years 1918—1927	161,247	2,588	16.0	141	54.3	2,030	12.6
1928	169,810	2,336	13.76	114	48.80	2,058	12.12



TABLE III.

Table showing, for each Rural District, the number of Births and Deaths, the number of Deaths of Infants, also the Birth Rate, Death Rate, and Rate of Infantile Mortality.

DISTRICT.	Area.	No. of Births.	No. of Deaths.	No. of Deaths Under 1 Year.	Population.	Birth Rate.	Death Rate.	Standardized Death Rate.	Rate of Infantile Mortality.
RURAL :—									
1. AXBRIDGE .....	93,036	346	303	19	24,810	13.95	12.21	9.08	54.9
2. BATH .....	27,360	224	146	11	14,630	15.31	9.98	8.17	49.1
3. BRIDGWATER .....	87,516	291	250	15	17,280	16.84	14.47	10.71	51.5
4. CHARD .....	55,236	181	130	7	12,350	14.66	10.53	8.24	38.7
5. CLUTTON .....	41,133	306	178	13	16,100	19.01	11.06	8.98	42.5
6. DULVERTON .....	78,980	69	56	6	4,785	14.42	11.70	9.22	87.0
7. FROME .....	51,558	156	130	11	10,890	14.33	11.94	9.46	70.5
8. KEYNSHAM .....	21,405	151	127	9	11,920	12.67	10.65	9.11	60.0
9. LANGPORT .....	59,407	176	180	3	12,950	13.59	13.90	10.26	17.0
10. LONG ASHTON .....	47,900	284	194	10	20,660	13.75	9.39	7.60	35.2
11. SHEPTON MALLET	46,561	157	99	3	9,683	16.21	10.22	7.86	19.1
12. TAUNTON .....	71,095	292	191	8	16,760	17.42	11.40	8.38	27.4
13. WELLINGTON .....	34,626	92	89	1	5,842	15.75	15.23	11.68	10.9
14. WELLS .....	58,119	195	109	7	10,450	18.66	10.43	7.94	35.9
15. WILLITON .....	97,710	160	159	10	12,070	13.26	13.17	9.64	62.5
16. WINCANTON .....	64,540	242	190	12	16,500	14.67	11.52	8.86	49.6
17. YEOVIL .....	54,898	293	223	10	17,760	16.50	12.56	9.73	34.1
Totals of Rural Population	991,080	3,615	2,754	155	235,440	15.35	11.70	9.03	42.9

TABLE IV.

Table showing, for each Urban District, the number of Births and Deaths, the number of Deaths of Infants, also the Birth Rate, Death Rate, and Rate of Infantile Mortality.

DISTRICT.	Area.	No. of Births.	No. of Deaths.	No. of Deaths Under 1 Year.	Population.	Birth Rate.	Death Rate.	Standardized Death Rate.	Rate of Infantile Mortality.
URBAN :—									
1. BRIDGWATER .....	930	272	203	8	16,120	16.87	12.59	10.59	29.4
2. BURNHAM .....	1,481	66	82	5	5,704	11.57	14.38	10.97	75.8
3. CHARD .....	442	58	47	0	4,196	13.82	11.20	8.86	0.0
4. CLEVEDON .....	3,017	82	73	4	6,930	11.83	10.53	7.03	48.8
5. CREWKERNE .....	1,243	58	40	2	3,596	16.13	11.12	8.83	34.5
6. FROME .....	1,194	137	158	7	10,840	12.64	14.58	11.39	51.1
7. GLASTONBURY .....	5,019	51	44	3	4,376	11.65	10.05	8.49	58.8
8. HIGHBRIDGE .....	744	50	30	3	2,670	18.73	11.24	9.68	60.0
9. ILMINSTER .....	531	35	38	2	2,241	15.62	16.96	13.59	57.1
10. MIDSOMER NORTON .....	3,970	129	74	3	8,083	15.96	9.16	9.08	23.3
11. MINEHEAD .....	2,470	67	63	6	6,029	11.11	10.45	8.56	89.6
12. PORTISHEAD .....	1,029	57	50	5	3,967	14.37	12.60	10.29	87.7
13. RADSTOCK .....	1,014	63	46	3	3,843	16.39	11.97	10.51	47.6
14. SHEPTON MALLET	3,548	57	55	2	4,201	13.57	13.09	10.76	35.1
15. STREET .....	2,742	60	58	4	4,515	13.29	12.85	11.19	66.7
16. TAUNTON .....	2,015	380	308	25	24,800	15.32	12.49	11.00	65.8
17. WATCHET .....	493	25	24	0	1,862	13.43	12.89	9.29	0.0
18. WELLINGTON .....	5,295	83	83	4	7,202	11.52	11.52	9.16	48.2
19. WELLS .....	719	70	66	8	4,476	15.64	14.75	10.41	114.3
20. WESTON-S-MARE	2,412	317	327	10	27,260	11.63	12.00	9.76	31.5
21. WIVELISCOMBE.....	201	16	15	1	1,259	12.79	11.91	9.97	62.5
22. YEOVIL .....	854	203	174	9	15,640	12.98	11.13	10.51	44.3
Totals of Urban Population	41,363	2,336	2,058	114	169,810	13.76	12.12	10.02	48.8
Administrative County	1,032,443	5,951	4,812	269	405,250	14.68	11.87	9.44	45.2
England and Wales, 1928		.....	.....	.....	.....	16.7	11.7	11.7	65

## SECTION II.

## INFECTIOUS DISEASES.

TABLE V.

	Small Pox.	Scarlet Fever.	Diphtheria.	*Enteric and Paratyphoid Fever.	Puerperal Fever.	Ophthalmia Neonatorum.	Cerebro-spinal Meningitis.	Dysentery.	Malaria.	Pneumonia.	Acute Poliomyelitis.	Encephalitis Lethargica.
<b>URBAN.</b>												
Bridgwater	1	11	3	0	1	3	1	1	0	17	0	0
Burnham	—	13	1	0	0	0	0	0	0	12	3	0
Chard	—	1	3	0	0	0	0	0	0	6	0	0
Clevedon	—	11	3	0	0	0	0	0	0	4	0	0
Crewkerne	—	8	0	0	0	0	0	0	0	0	0	0
Frome	3	66	9	0	0	0	0	0	0	8	0	0
Glastonbury	—	2	1	0	0	0	0	0	0	3	0	1
Highbridge	—	2	0	0	0	0	0	0	0	2	0	0
Ilminster	—	3	8	0	1	0	0	0	0	4	0	0
Midsomer Norton	—	28	2	0	0	0	0	0	1	57	0	0
Minehead	—	9	2	1	0	0	0	0	0	0	0	1
Portishead	—	3	0	0	0	0	0	0	0	2	0	0
Radstock	—	9	14	1	0	2	0	0	0	16	0	2
Shepton Mallet	—	11	2	0	1	0	0	0	0	7	0	0
Street	—	0	1	0	3	0	0	0	0	5	0	1
Taunton	—	53	9	0	1	1	0	0	1	14	0	0
Watchet	—	0	1	0	0	0	0	0	0	0	0	0
Wellington	—	8	66	0	0	0	0	0	0	3	0	0
Wells	1	46	0	1	0	0	0	0	0	6	0	0
Weston-super-Mare	1	49	86	20	3	4	1	0	0	22	2	1
Wiveliscombe	—	1	0	0	0	0	0	0	0	0	0	0
Yeovil	—	8	13	1	1	5	0	0	0	16	0	2
<b>RURAL.</b>												
Axbridge	—	25	12	4	1	2	1	0	1	39	1	0
Bath	—	27	19	4	0	1	0	1	0	6	0	0
Bridgwater	—	24	2	2	1	1	0	0	1	18	0	2
Chard	—	32	1	2	0	0	0	0	0	21	0	0
Clutton	—	44	4	0	3	2	0	0	0	47	0	0
Dulverton	—	0	0	0	0	0	0	0	0	5	0	0
Frome	—	80	2	1	0	1	0	0	1	19	3	0
Keynsham	—	24	10	0	1	0	0	1	1	23	0	1
Langport	—	24	5	0	0	1	0	0	0	12	0	0
Long Ashton	—	35	5	0	0	0	0	1	0	30	0	0
Shepton Mallet	—	17	1	0	0	0	0	0	0	12	0	1
Taunton	—	86	5	1	4	4	0	3	0	47	0	0
Wellington	—	5	5	0	0	0	0	0	1	4	0	0
Wells	—	16	0	1	0	1	1	0	0	20	0	0
Williton	—	16	1	1	0	0	1	0	0	5	0	0
Wincanton	—	43	14	1	1	2	0	0	0	23	0	0
Yeovil	—	40	19	0	3	4	0	0	0	15	0	1
Urban Districts	6	342	224	24	11	15	2	1	2	204	5	8
Rural Districts	0	538	105	17	14	19	3	6	5	346	4	5
Administrative County	6	880	329	41	25	34	5	7	7	550	9	13



**Small-pox.** After being almost entirely free from small-pox for about 18 years, there were a number of separate invasions during the year. In all, 7 separate cases were notified, but one subsequently was found not to be small-pox and the notification was withdrawn. These represented 4 separate invasions all being confined to single cases except at Frome where three persons in one family developed the disease. The first two cases were tramps and the cases were removed from "casual" Workhouse Wards. At Frome a brother and sister working in the town developed the disease at the same time, but the source of infection could not be traced. The remaining case, at Weston-super-Mare, acquired the disease in Monmouthshire, there being three cases in the house next door to the one from which she came. Great promptness was exercised in removing the cases and in taking all possible steps to prevent the spread of the disease. Fortunately these steps were adequate and no further spread resulted.

All the cases were removed, as soon as diagnosed, to the County Council Small Pox Hospital. The Hospital is kept ready but with only a caretaker and his wife in residence, no nurses being retained. The Hospital was open with cases from February 7th to June 22nd. The total cost of the maintenance of these cases was considerable and is part of the price we pay for the neglect in the County of vaccination and re-vaccination.

The increased prevalence in the Country is due to one cause and one cause only—the increased and increasing neglect of vaccination. This has been going on now for many years and in consequence much of the child and young adult population is unprotected. The elaborate and efficient procedures available for the control of infectious diseases generally are also available for small-pox and frequently, with the aid of the vaccination of the contacts, are sufficient to prevent its spread. On the other hand, there occurs with small-pox, as in the other infectious diseases invasions which, owing to missed cases or other unfavourable factors, fail to be controlled by these measures and a widespread outbreak occurs. This is what has happened during recent years in Gloucester, Durham County, Monmouthshire and many other parts of England.

Fortunately, the type of small-pox met with in this Country of recent years has been mild and very few deaths have resulted. This has led many unthinking persons to regard this disease as of comparative unimportance. An acquaintance with the history of small-pox in the past and the knowledge that outbreaks of a virulent character may occur without warning would have prevented any acceptance of this complaisant attitude.

We have also to take into consideration the serious cost of outbreaks of small-pox, both the direct costs of isolation and control and the even more considerable losses thrown upon the general community. This heavy financial loss is, in my opinion, an unnecessary one and due to the failure to utilise the approved preventative, i.e., vaccination.

Frequently one hears the view expressed that the medical profession should start a great campaign of propaganda to bring home the importance of vaccination and its value as a preventative and that not enough is being done by them to counteract the pernicious propaganda of the anti-vaccinationists. That is not a view with which I agree. The medical profession has with practically unanimous voice explained their view as to the comparative harmlessness and reliability of vaccination. The scientific data is ample and complete and every outbreak does but confirm it. The medical advisors of the Ministry concur in the same advice. It is for the State to act or not on that advice. At present, with a full knowledge of the facts, other conditions are allowed to operate and vaccination has been allowed to become largely a dead letter. The considerable suffering and heavy expense which falls on the community is a direct consequence. It is for the bodies upon which this expense falls to decide if it is a reasonable price to pay for the liberty of avoiding vaccination. If they think it is too heavy the remedy is in their hands since the united influence of a majority of Local Authorities to get vaccination made a reality cannot be doubted. The alternative is many more Small-Pox Hospitals and unlimited expense. The attitude of Medical Officers of Health and the rest of the medical profession is perfectly clear. We have advised and our advice is neglected. We have no more to say, only to reiterate that the neglect is not our fault and to see that the blame is on the right shoulders.

In view of the small permanent accommodation the County Council during the year authorised the foundations, water supply, and sewage being extended to accommodate an additional 12 beds and to provide for the extra staff. The actual superstructures were not however erected but can be put up at short notice.

**Scarlet Fever.** This disease was fairly prevalent and 880 cases were notified, being 229 more cases than in the previous year. There were 5 deaths, giving a case mortality of 0.57 per cent.

**Diphtheria.** 329 cases were notified with 21 deaths, a case mortality of 6.4 per cent. The distribution of the cases is shown in Table V. Most cases were notified from Weston-super-Mare and Wellington.

**Enteric and Paratyphoid Fevers.** 41 cases were notified, with 6 deaths. This is considerably more than the average for the County. Twenty of the cases were at Weston-super-Mare, the majority of the others were scattered through the County. Nearly all the Weston-super-Mare cases were part of one outbreak, the source and method of infection not being completely elucidated.

**Encephalitis Lethargica.** Table V. shows that 13 cases were notified, and that these were distributed through the County and with no epidemic. This number is a welcome reduction over the figures for previous years. There were, however, 9 deaths, a case mortality of 69 per cent.

Only 5 cases of Cerebro-spinal Meningitis and 9 cases of acute Poliomyelitis were notified.

**Measles.** I do not know the number of cases as the disease is not generally notifiable, but there were 36 deaths, 29 being in children under 5 years of age. This disease was very prevalent over part of the year. Of recent years the number of deaths has been very low and this is the highest total for a great many years.

**Whooping Cough.** There were 17 deaths during the year, 11 being under twelve months old, 4 between 1 and 2 years, 1 between 2 and 5 years, and 1 over 75 years.

## HOSPITAL ACCOMMODATION.

1. **Provided by the County Council.** A small emergency hospital of 8 beds at Cossington is provided for Small Pox cases. A site has been obtained near Chew Magna but this has no buildings upon it and has not been developed, apart from the provision of a water supply. The Institutions for Tuberculosis are discussed under that section. No Institutional beds are provided for maternity cases.

2. **Subsidized by the Council.** At Bath, 30 beds are retained for Orthopaedic cases from the Administrative County at the Bath, Somerset and Wilts Children's Orthopaedic Hospital. At Bridgwater, 6 beds are retained for infants (see page 29).

Grants which, in most cases, are one-third of the maintenance charges, are paid to a number of Isolation Hospitals in the County provided they are maintained and managed to the satisfaction of the County Council. These hospitals are :—

Minehead, Watchet, and Williton Hospital.  
Shepton Mallet Joint Isolation Hospital.  
Taunton Joint Isolation Hospital.  
Wincanton Isolation Hospital.

3. **Isolation Hospitals provided by Local Sanitary Authorities.** *Urban Areas.* Isolation Hospital accommodation is provided for Bridgwater, Clevedon, Frome, Glastonbury, Minehead, Shepton Mallet, Street, Taunton, Watchet, Wells, Weston-super-Mare and Yeovil. There is no provision for Burnham, Chard, Crewkerne, Highbridge, Ilminster, Midsomer Norton, Portishead, Radstock, Wellington and Wiveliscombe.

*Rural areas.* Some Isolation Hospital accommodation is provided for Bath, Frome, Keynsham, Langport, Long Ashton, Shepton Mallet, Taunton, Williton and Wincanton. There is no provision for Axbridge, Bridgwater, Chard, Clutton, Dulverton, Wellington, Wells, and Yeovil.

The Isolation Hospital at Cross, for the areas of Axbridge Rural, Burnham and Highbridge, was completed during the year, but not furnished or in use. Once more I have to report that the Hospital at Paulton, for the areas of Clutton, Midsomer Norton and Radstock, still exists only on paper ; small matters of drainage have delayed its erection.



TABLE VI.

## Cases removed to Isolation Hospitals.

DISTRICT.	Cases removed to Hospital.				Percentage of Cases removed to Hospital.		
	Scarlet Fever.	Diphtheria.	Enteric Fever.	Other Diseases.	Scarlet Fever.	Diphtheria.	Enteric Fever.
<b>URBAN :—</b>							
Bridgwater .. ..	7	3	0	—	64	100	—
Burnham .. ..	0	0	0	—	0	0	—
Chard .. ..	0	0	0	—	0	0	—
Clevedon .. ..	5	2	0	—	45	67	—
Crewkerne .. ..	0	0	0	—	0	—	—
Frome .. ..	46	9	0	—	70	100	—
Glastonbury .. ..	0	1	0	—	0	100	—
Highbridge .. ..	0	0	0	—	0	—	—
Ilminster .. ..	0	1	0	—	0	13	—
Midsomer Norton .. ..	1	0	0	—	4	0	—
Minehead .. ..	9	2	1	—	100	100	100
Portishead .. ..	1	0	0	—	33	—	—
Radstock .. ..	2	0	1	—	22	0	100
Shepton Mallet .. ..	11	2	0	—	100	100	—
Street .. ..	0	0	0	—	—	0	—
Taunton .. ..	31	8	0	—	58	89	—
Watchet .. ..	0	0	0	—	—	0	—
Wellington .. ..	5	49	0	—	63	74	—
Wells .. ..	30	0	1	—	65	—	100
Weston-super-Mare .. ..	35	65	12	—	71	76	60
Wiveliscombe .. ..	1	0	0	—	100	—	—
Yeovil .. ..	7	0	0	—	88	0	0
Total Urban .. ..	191	142	15	—	56	63	63
<b>RURAL :—</b>							
Axbridge .. ..	0	0	0	—	0	0	0
Bath .. ..	18	14	1	—	67	74	25
Bridgwater .. ..	1	2	0	—	4	100	0
Chard .. ..	3	0	0	—	9	0	0
Clutton .. ..	0	0	0	—	0	0	—
Dulverton .. ..	0	0	0	—	—	—	—
Frome .. ..	49	0	0	—	61	0	0
Keynsham .. ..	16	7	0	—	67	70	—
Langport .. ..	10	5	0	—	42	100	—
Long Ashton .. ..	27	3	0	—	77	60	—
Shepton Mallet .. ..	14	1	0	—	82	100	—
Taunton .. ..	65	5	0	—	76	100	0
Wellington .. ..	1	1	0	—	20	20	—
Wells .. ..	7	0	1	—	44	—	100
Williton .. ..	10	0	1	—	63	0	100
Wincanton .. ..	43	14	1	—	100	100	100
Yeovil .. ..	0	0	0	—	0	0	—
Total Rural .. ..	264	52	4	—	49	50	25
County Total .. ..	455	194	19	—	52	59	48

# VENEREAL DISEASES.

The attendances of Somerset cases at the different clinics for the year 1928 were as follows :—

Clinic.	New cases 1928	Attendances 1928	NEW CASES.				ATTENDANCES.		
			1925.	1926.	1927	Increase or decrease during 1928.	1926.	1927.	Increase or decrease during 1928.
Bath .....	14	664	19	19	11	+ 3	417	473	+191
Bristol .....	63	666	37	38	53	+10	335	607	+ 59
Taunton .....	80	1,554	74	69	81	— 1	1,282	1,582	— 28
Yeovil .....	69	711	25	42	65	+ 4	534	615	+ 96
Bridgwater .....	36	678	50	38	37	— 1	547	572	+106
Frome .....	12	254	7	8	19	— 7	83	286	— 32
Glastonbury .....	9	47	2	4	3	+ 6	43	36	+ 11
Minehead .....	14	116	10	8	11	+ 3	163	133	— 17
Radstock .....	10	48	3	5	2	+ 8	32	13	+ 35
Weston-super-Mare .....	68	1,169	46	50	56	+12	743	653	+516
All Clinics .....	375	5,907	273	281	338	+37	4,179	4,970	+937

The figures show an increase in the number of new cases and a considerable increase in the number of attendances. No less than 79 per cent. of the new cases and 77 per cent. of the total attendances were at County Council clinics. The increased attendance figures are in part due to the increase in the attendances for irrigation and not for a medical examination.

With this system of multiple clinics it is possible for every case to obtain treatment at a reasonable distance from his or her home, and the thorough following up of cases is in this way materially facilitated. Patients are now attending until cure is effected very much better than in the earlier years. No beds are now available except in connection with the above-mentioned Hospitals. With these hospitals, arrangements are made whereby cases can be sent in as in-patients should this be necessary. From time to time the facilities offered are widely advertised through the Local Authorities, posters in sanitary conveniences, etc., while periodically circulars are sent to medical men. Medical Practitioners in the County qualified to receive supplies of arsenobenzol compounds can obtain them free of charge on request to the County Medical Officer. Only 20 Medical Practitioners are on this free list.

Bacteriological work in connection with venereal diseases is arranged for either in connection with Bristol University Laboratory or at the County Health Laboratory.

During the year the following samples were examined :—

Samples.	For Medical Officers of Clinics	For Medical Practitioners.	Total.
Wasserman	408	237	645
Gonococcus	722	30	752
Spirochetes	2	0	2
Fixation Tests	—	—	79
	1,132	267	1,478

## TUBERCULOSIS.

Only small developments of the Scheme for dealing with pulmonary tuberculosis took place during 1928, the chief being the provision of 4 extra beds at Quantock Sanatorium and 4 at Compton Bishop Children's Home. An additional artificial light centre was opened at Minehead.

### TABLE VII.

Year.	Phthisis Death rates.			Other Tuberculous Diseases			Tuberculosis Death-rate.	Deaths in a population of 390,000.	
	Rural.	Urban.	County.	Rural.	Urban.	County.	County.	Phthisis.	All Tuberculosis
1901	0.88	0.84	0.871	0.18	0.23	0.202	1.073	340	418
1902	0.86	0.89	0.877	0.20	0.19	0.201	1.078	342	420
1903	0.94	0.76	0.879	0.19	0.34	0.251	1.130	343	441
1904	0.99	0.97	0.989	0.20	0.34	0.255	1.244	386	485
1905	0.90	0.91	0.905	0.14	0.18	0.162	1.067	353	416
1906	0.90	0.86	0.890	0.13	0.37	0.221	1.111	347	433
1907	0.83	0.85	0.842	0.24	0.26	0.253	1.095	328	427
1908	0.91	0.93	0.922	0.24	0.31	0.274	1.196	360	466
1909	0.82	0.85	0.833	0.24	0.27	0.255	1.088	325	424
1910	0.98	0.78	0.912	0.16	0.24	0.197	1.109	356	433
1911	0.83	0.76	0.804	0.15	0.39	0.240	1.044	314	407
1912	0.69	0.90	0.778	0.17	0.20	0.191	0.970	303	378
1913	0.74	0.67	0.721	0.15	0.30	0.239	0.960	281	374
1914	0.86	0.79	0.833	0.21	0.26	0.232	1.065	325	415
1915	0.84	1.13	0.960	0.18	0.23	0.201	1.160	374	452
1916	0.75	0.97	0.838	0.16	0.25	0.194	1.032	327	402
1917	0.90	1.05	0.962	0.18	0.21	0.191	1.153	375	450
1918	1.09	1.30	1.180	0.21	0.24	0.225	1.403	460	547
1919	0.85	0.90	0.871	0.21	0.22	0.212	1.083	341	422
1920	0.65	0.93	0.765	0.14	0.27	0.196	0.961	298	375
1921	0.63	0.76	0.685	0.16	0.30	0.220	0.904	267	353
1922	0.75	0.78	0.761	0.18	0.18	0.180	0.941	297	367
1923	0.65	0.76	0.696	0.19	0.22	0.206	0.902	271	352
1924	0.60	0.74	0.656	0.15	0.13	0.140	0.797	256	311
1925	0.61	0.73	0.659	0.12	0.14	0.126	0.784	257	306
1926	0.53	0.54	0.533	0.13	0.14	0.138	0.671	208	262
1927	0.55	0.64	0.586	0.13	0.13	0.130	0.716	228	279
1928	0.59	0.71	0.639	0.08	0.16	0.113	0.753	249	294

While not so small as the very low rates for the last two years, it is again very low. A quite uniform decline is not to be expected.

The actual results achieved are most clearly seen when the figures are calculated on a standard population of 390,000 which is about the present population of the Administrative County. These figures are set out and show that as many as 147 fewer persons died from tuberculosis in the County in 1928 than would have been the case 25 years ago with the same population. This decline now includes both tuberculosis of the lungs and non-pulmonary tuberculosis.



TABLE VIII.

New cases of tuberculosis and of deaths from the disease in the County during 1928.

Age Periods.	New cases.				Deaths.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M	F.	M.	F.	M.	F.	M.	F.
0—1	0	0	4	1	1	0	2	1
1—5	4	2	14	8	1	0	4	2
5—10	28	23	21	21	2	2	5	5
10—15	19	22	12	7				
15—20	29	40	7	18	22	32	2	4
20—25	37	45	5	10				
25—35	44	88	6	7	69	52	7	2
35—45	42	42	6	5				
45—55	25	16	3	6	37	24	4	5
55—65	15	15	0	1				
65 and upwards	8	5	1	0	9	8	0	3
Totals	251	298	79	84	141	118	24	22

The following figures show the deaths, notifications and number of cases under supervision since 1913 :—

TABLE IX.

Year.	Deaths.	*Notifications.	Living Cases.
1913	377	958	429
1914	422	984	832
1915	428	933	1,238
1916	467	872	1,538
1917	393	1,036	2,053
1918	480	949	2,417
1919	388	922	2,864
1920	358	860	3,286
1921	350	882	3,754
1922	366	732	4,120
1923	354	707	4,473
1924	317	701	4,857
1925	312	769	5,314
1926	268	729	5,775
1927	287	703	6,191
1928	305	713	6,597

\*These are primary cases only and do not include institutional cases.  
Of the 305 deaths from tuberculosis, 28 were not notified.

**TABLE X.**  
**Tuberculosis Notifications and Deaths.**

URBAN DISTRICTS.	Number of cases notified.				Number of primary notifications per 1,000 population.	Number of Deaths during the year from Pulmonary Tuberculosis	Number of Deaths during the year from other varieties of Tuberculosis.	RURAL DISTRICTS.	Number of cases notified.				Number of primary notifications per 1,000 population.	Number of Deaths during the year from Pulmonary Tuberculosis.	Number of Deaths during the year from other varieties of Tuberculosis.
	Pulm.		Non-Pulm.						Pulm.		Non-Pulm.				
	Inst.	Non-Inst.	Inst.	Non-Inst.					Inst.	Non-Inst.	Inst.	Non-Inst.			
Bridgwater .....	21	39	0	8	2.92	17	2	Axbridge .....	14	31	0	12	1.73	16	1
Burnham .....	0	8	0	3	1.93	1	1	Bath .....	5	13	0	5	1.23	6	1
Chard .....	4	3	0	3	1.43	2	1	Bridgwater .....	8	21	0	6	1.56	13	2
Clevedon .....	6	12	0	1	1.88	3	0	Chard .....	4	14	0	6	1.62	7	0
Crewkerne .....	1	5	0	3	2.22	3	0	Clutton .....	0	6	0	5	0.68	7	0
Frome .....	0	13	0	4	1.57	8	1	Dulverton .....	1	6	0	3	1.88	5	2
Glastonbury .....	0	7	0	2	2.06	1	1	Frome .....	5	10	0	1	1.01	3	0
Highbridge .....	0	2	0	0	0.75	2	0	Keynsham .....	4	12	0	8	1.68	2	4
Ilminster .....	3	5	0	0	2.23	2	1	Langport .....	5	16	0	7	1.78	14	0
Midsomer Norton	1	8	0	6	1.73	2	0	Long Ashton .....	9	20	2	9	1.40	10	1
Minehead .....	7	21	0	1	3.65	4	4	Shepton Mallet	0	10	0	4	1.45	2	0
Portishead .....	0	6	0	0	1.51	7	1	Taunton .....	7	24	1	9	1.97	11	2
Radstock .....	0	3	0	0	0.78	0	1	Wellington .....	0	6	0	5	1.88	4	1
Shepton Mallet	0	5	0	2	1.67	4	0	Wells .....	0	10	0	5	1.43	7	0
Street .....	0	4	0	1	1.11	3	0	Williton .....	12	34	0	6	3.31	14	2
Taunton .....	26	45	0	3	1.93	19	3	Wincanton .....	3	17	1	13	1.82	7	2
Watchet .....	1	6	1	0	3.22	5	0	Yeovil .....	9	18	0	6	1.35	11	1
Wellington .....	4	14	0	4	2.50	3	0								
Wells .....	0	6	0	2	1.79	0	1								
Weston-s-Mare	16	52	0	8	2.20	25	6								
Wiveliscombe	0	0	0	0	0.0	0	0								
Yeovil .....	11	17	0	3	1.28	9	4								
Totals .....	101	281	1	54	1.97	120	27	Totals .....	86	268	4	110	1.60	139	19

**Summary of Treatment given during 1928.**

Sanatorium .....	144
Sanatorium with Dispensary .....	37
"    Domiciliary (without shelter) .....	19
"    "    (with shelter) .....	2
"    Dispensary and Domiciliary .....	3
Dispensary and Domiciliary .....	3
Dispensary (5 with shelter) .....	80
Shelter provided at home .....	20

In addition, milk, for a period of two months, was provided for 75 cases ; nursing for 3 cases ; Dental treatment for 6 cases ; X-ray examinations for 20 cases.

Unused buildings at Quantock Sanatorium were again utilized during 1928 as a Summer Camp. Children were selected who were predisposed to tuberculosis on account of general debility or undernourishment, with special attention to those from homes in which there was an active case of tuberculosis. Of such children, 40 girls and 40 boys, were each given 4 weeks treatment under open air conditions and on the lines of a holiday camp. The increase in weight and marked improvement in general health which resulted was again most satisfactory. This work must be regarded as an important piece of tuberculosis preventive work. The Staff utilised was almost entirely voluntary.

Dr. Short, County Tuberculosis Officer, has drawn up the following tables and remarks dealing with the treatment given under the County Council scheme and the results obtained.



### Tuberculosis Officer's Clinical Report for 1928.

The year under review has been one of steady work rather than of outstanding feature and Somerset has again one of the lowest death rates among the large Counties of England.

Two severe winters separated by a very hot period constitute a real test for the advanced and moderately advanced tuberculosis patient, and the result is seen in an increased death rate amongst pulmonary cases but not amongst cases of non-pulmonary tuberculosis.

Unfortunately there still continue to be cases which are really hopeless when first seen by the Tuberculosis Officer, and these were slightly more in number than in 1927. Some of these "stage 3" cases were acute and rapid and constitute one of the distressing groups where treatment would have been hopeless from the first. They are certainly less numerous than some years ago, probably owing to the systematic preventive measures adopted in the County which render known cases of tuberculosis less likely to be dangerous to others.

Quite a number of well-marked and advanced cases come to Somerset in search of health and this we have to accept as the penalty of our reputation.

The total attendances at the County Tuberculosis Dispensaries during 1928 were 9,982, as against 11,495 in 1927.

The new cases seen numbered 1,499 and they were classified after careful and often repeated examination as follows :—

Pulmonary Tuberculosis	T.B. Negative	.....	.....	351
	T.B. + Stage 1	.....	.....	11
	T.B. + „ 2	.....	.....	87
	T.B. + „ 3	.....	.....	55
				<hr/>
				504
Non-Pulmonary Tuberculosis		.....	.....	77
Not Tuberculous	.....	.....	.....	892
Doubtfully Tuberculous	.....	.....	.....	26
				<hr/>
				1,499
				<hr/>

It is an encouraging feature that fewer cases were suspected of being tuberculous in 1928 than in the previous years, and 29 fewer were found actually to have the disease.

The value of being able to obtain an expert opinion and a definite diagnosis is increasingly used and appreciated by the medical practitioners of the County. The difficulties of exact diagnosis have been increased lately by the appearance of a form of Influenzal broncho-pneumonia which for a long time closely simulates tuberculosis and may go on to a fatal termination.

The County Sanatoria have again proved their value, both as regards early cases, sent with a view to complete cure and also for dangerous "open" cases sent with a view to protect others, or where home nursing was impossible. The practice of sending early but definite cases of pulmonary tuberculosis in children to Compton Bishop has more than justified itself in the wonderful improvement which these children show and maintain in after years.

It is impossible to estimate the value of the voluntary Care Committees in supplementing the Council's official arrangements, and it is not too much to say that many patients owe their lives and earning capacity to the generosity and keenness of this large band of voluntary health workers.

L. J. SHORT.

TABLE XI.

Condition of all cases discharged from Quantock Sanatorium, from the opening until 31st December, 1928.

	<i>Cases.</i>	<i>Percentage.</i>
Arrested and Working .....	78	17.6
Arrested but <i>not</i> Working .....	9	2.0
Not Arrested but Working .....	142	32.0
Not Arrested and <i>not</i> Working .....	105	23.6
Lost sight of .....	52	11.7
Dead .....	58	13.1
	<hr/> 444 <hr/>	

*Note.* Some of the cases are not admitted as curative cases but as advanced cases sent in to prevent home infection. This accounts for almost all the "dead" group.

The expression "arrested" has a technical meaning, and is only applied to cases free from any symptoms for at least two years. Many in the "non-arrested" group are apparently quite well, but the two years' period has not elapsed.

TABLE XII.

**Complete results as regards working capacity.**

All years, (1912-1928).		Cured.	Working.	Not Working.	Dead.	Lost sight of or Removed.	Total cases.
Men	Cases	703	403	278	1022	405	2,811
	Percentage	25	14	10	36	15	
Women	Cases	640	547	370	868	390	2,815
	Percentage	23	19	13	31	14	
Children	Cases	1,157	623	184	137	295	2,396
	Percentage	48	26	8	6	12	
Un- Classified	Cases	0	0	0	124	229	353
	Percentage	0	0	0	35	65	
Total	Cases	2,500	1,573	832	2,151	1319	8,375
	Percentage	30	19	10	25	16	

TABLE XIII.

**Admissions to Sanatorium during 1928.**

Sanatorium.	Men.		Women.	Children.	Total.
	Civilian.	Ex-Service.			
Quantock .....	73	1	70	2	146
Taunton .....	20	—	19	—	39
Wincanton .....	24	1	15	—	40
Compton Bishop .....	—	—	—	34	34
Alton Hospital .....	—	—	—	5	5
Bath Ortho. Hospital .....	—	—	—	4	4
Papworth Hall .....	1	—	—	—	1
Preston Hall .....	1	1	—	—	2
Liphook .....	—	1	—	—	1
	119	4	104	45	272

TABLE XIV.

**Cases treated through the County Dispensaries.**

Dispensary.	Persons treated at Dispensaries during 1928.	Under treatment at Dispensaries Dec. 31st, 1928.	Total Dispensary Attendances, 1928.
Bath (City) .....	152	26	2,111
Bath (County) .....	41	4	351
Bridgwater .....	67	9	953
Bristol .....	68	26	597
Chard .....	62	3	176
Clevedon .....	48	6	368
Frome .....	59	11	326
Glastonbury .....	58	5	328
Langport .....	44	7	232
Minehead .....	166	44	827
Radstock .....	47	10	408
Shepton Mallet .....	27	4	245
Taunton .....	189	80	951
Wellington .....	33	5	385
Weston-s-Mare .....	97	20	859
Wincanton .....	39	13	249
Yeovil .....	105	13	616
	1,302	286	9,982



**Table showing the work of the Dispensaries during the Year 1928.**

[illegible]

**cases discharged from Residential Institutions during the year 1928.**

Classification on admission to the Institution	PULMONARY TUBERCULOSIS.													TOTAL.
	NON-PULMONARY TUBERCULOSIS.													
	Peripheral Glands.				Other Organs.				Abdominal.				Bones and Joints	
	Class T.B. minus				Class T.B. plus. Group 1				Class T.B. plus. Group 2				Class T.B. plus. Group 3	
Condition at time of discharge.	Duration of Residential Treatment in the Institution.													
	Under 3 months.			3-6 months.			6-12 months.			More than 12 months.				
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.		
Quiescent .....	11	6	-	19	16	4	10	21	10	-	-	11	108	
Improved .....	3	4	3	2	1	1	1	1	2	-	-	2	20	
No material improvement .....	1	3	-	-	-	-	-	-	-	-	-	-	4	
Died in Institution .....	-	1	-	1	-	-	-	-	-	-	-	-	2	
Quiescent .....	1	-	-	1	-	-	2	-	-	1	-	-	5	
Improved .....	-	-	-	-	-	-	-	1	-	-	-	-	1	
No material improvement .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
Died in Institution .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
Quiescent .....	2	-	-	5	-	-	5	2	-	2	-	-	16	
Improved .....	4	1	-	8	4	-	9	3	1	3	1	1	35	
No material improvement .....	1	2	-	-	-	-	1	2	-	-	-	-	6	
Died in Institution .....	-	-	-	-	1	-	-	-	-	-	1	-	2	
Quiescent .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
Improved .....	2	1	-	1	-	-	1	6	-	1	1	-	13	
No material improvement .....	6	3	-	7	1	-	2	1	-	2	1	-	23	
Died in Institution .....	6	4	-	1	2	-	2	2	-	-	-	-	17	
Quiescent or Arrested .....	-	-	2	-	-	1	-	-	-	-	-	3	6	
Improved .....	-	-	-	-	-	-	-	-	-	-	1	-	1	
No material improvement .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
Died in Institution .....	-	-	1	-	-	-	-	-	-	-	-	-	1	
Quiescent or Arrested .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
Improved .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
No material improvement .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
Died in Institution .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
Quiescent or Arrested .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
Improved .....	-	-	-	1	-	-	-	-	-	-	-	-	1	
No material improvement .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
Died in Institution .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
Quiescent or Arrested .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
Improved .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
No material improvement .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
Died in Institution .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Under week.			1-2 weeks.			2-4 weeks.			More than 4 weeks.				
Tuberculosis .....	-	-	-	-	-	-	-	-	-	-	1	-	1	
Non-tuberculosis .....	-	-	-	-	-	-	-	-	-	-	-	-	-	
Doubtful .....	-	-	-	-	-	-	-	-	-	1	-	-	1	



TABLE XVII.

Table showing in summary form the condition of all patients whose case records are in the possession of the dispensaries at the end of 1928, arranged according to the years in which the Patients first came under Public Medical Treatment.

Condition at the time of the last record made during the year to which the Return relates.				Previous to 1926.		1926.										1927.										1928.														
				PULMONARY AND NON-PULMONARY.		PULMONARY.					NON-PULMONARY.					PULMONARY.					NON-PULMONARY.					PULMONARY.					NON-PULMONARY.									
				ALL GROUPS.		Class T.B. plus.					Bones and Joints.					Class T.B. Minus.					Bones and Joints.					Class T.B. Minus.					Class T.B. plus.					Bones and Joints.				
						Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).	Group 1.						Group 2.	Group 3.	Total (Class T.B. plus).	Group 1.	Group 2.						Group 3.	Total (Class T.B. plus).	Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).									
Alive.	CURED.		Adults	M.	702	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
			F.	638	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	Child- ren.	M.	1157	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
		F.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	WORKING.		Adults	M.	204	46	5	11	1	17	6	2	1	-	9	62	3	16	-	19	3	-	2	-	5	32	2	5	-	7	-	-	-	-	-					
			F.	297	81	1	5	-	6	2	2	-	5	9	88	2	9	1	12	2	2	-	2	6	39	1	3	1	5	-	1	1	-	8	10					
	Child- ren.	M.	201	45	-	-	-	-	3	6	1	16	26	30	-	1	-	1	2	2	2	12	18	23	-	-	-	-	1	1	-	10	12	-	-					
		F.	157	26	-	1	-	1	1	3	-	7	11	30	-	-	1	1	2	-	-	10	12	58	4	28	10	42	9	-	-	-	9	-						
	NOT WORKING.		Adults	M.	100	9	2	9	3	14	1	-	-	1	17	2	14	8	24	3	1	-	4	58	4	28	10	42	6	1	-	4	11	-	-					
			F.	100	27	2	10	4	16	3	1	-	-	4	36	2	17	5	24	2	3	1	1	7	93	3	36	13	52	6	2	-	5	13	-					
	Child- ren.	M.	17	4	-	-	-	-	2	1	-	2	5	8	-	-	-	-	7	1	1	3	12	25	-	1	-	1	6	2	-	5	13	-	-					
		F.	33	3	-	1	-	1	3	-	2	-	5	16	-	-	-	-	3	3	-	1	7	21	-	-	-	-	1	3	-	9	13	-	-					
LOST SIGHT OF OR REMOVED.					1095	67	1	10	2	13	8	2	2	10	22	58	3	11	7	21	4	3	-	1	8	21	1	7	4	12	-	1	-	1	2					
DEAD.		Adults	M.	893	11	4	23	24	51	-	-	-	-	-	11	3	8	12	23	2	-	-	-	2	12	-	5	14	19	-	-	-	-	-						
			F.	741	18	1	17	18	36	2	2	-	-	4	14	1	15	16	32	-	1	-	-	1	7	-	2	13	15	-	-	-	-	-						
		Child- ren.	M.	127	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1	-	-	2	-	-	-	-	-	-	-	1	-	-	-					
			F.		3	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-					
DEAD(Unclassified)					124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Totals					6586	342	16	87	52	155	31	19	6	41	97	373	16	91	50	157	31	17	6	30	84	351	11	87	55	153	24	11	1	41	77					

**Quantock Sanatorium.** The Medical Superintendent, Dr. V. C. Martyn, has furnished the following report :—

The Sanatorium has been open for the reception of 68 cases, (33 males and 35 females) throughout the year 1928. During this period 146 patients have been admitted, of whom 77 were males and 69 females. 142 patients were discharged, 79 males and 63 females. There were three deaths during the year.

The average stay for female patients was 191 days and for male patients 168 days. This is an average stay of about 26 weeks for each patient. Five patients left the Sanatorium before the completion of four weeks treatment.

Treatment in the Sanatorium was carried out under open-air conditions with graduated rest, exercise and work. Arrangements are being made whereby artificial pneumothorax treatment can be given here. Other methods of treatment are also being tried with apparently good results.

The men are now taking walks on the hills three afternoons a week, whilst the women patients are also walking three afternoons on the hills and in suitable weather doing light gardening.

#### WEIGHTS.

##### Increase in weights in Kilos.

			1—6	6—12	12—18	Total.
Males	.....	.....	45	24	2	71
Females	.....	.....	38	18	1	57

The average gain in weight of all patients (136) weighed on discharge	=	4.53 kilos.
„ „ of 76 male patients „ „	=	4.56 „
„ „ of 60 female „ „	=	4.50 „

The average loss in weight of 8 patients weighed on discharge = 2.35 „

Six patients were not weighed on discharge. Of these 3 died and 3 were on absolute rest.

#### Working capacity of patients on admission and discharge.

	<i>Full Working Capacity.</i>		<i>Fit for light work.</i>		<i>Unfit for work.</i>	
	Admission.	Discharge.	Admission.	Discharge.	Admission.	Discharge.
Males	0	41 = 51.9 %	7	22 = 27.8 %	70	14 = 17.9 %
Females	0	38 = 60.3 %	2	15 = 23.8 %	60	9 = 14.3 %

(3 patients died = 2.1 %).

On admission 93.7 % of all patients were unfit for any work ; 6.3 % were fit for light work. On discharge 55.6 % of all patients were fit for full work ; 26.1 % for light work ; and 16.2 % were unfit for work. 2.1 % died. These results are slightly better than last year and quite satisfactory.

*Duration of Treatment and Condition on discharge.*

		Under 3 months.			3—6 months.			6—12 months.			Over 12 months.			Total
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Class TB Minus.	Quiescent .....	10	5	0	15	15	0	9	21	2	0	0	0	77
	Improved .....	2	3	1	1	0	0	1	1	0	0	0	0	9
	No material improvement .....	1	1	0	0	0	0	0	0	0	0	0	0	2
	Died .....	0	0	0	0	0	0	0	0	0	0	0	0	0
Class TB + Group 1.	Quiescent .....	0	0	0	0	0	0	2	0	0	1	0	0	3
	Improved .....	0	0	0	0	0	0	0	1	0	0	0	0	1
	No material improvement .....	0	0	0	0	0	0	0	0	0	0	0	0	0
	Died .....	0	0	0	0	0	0	0	0	0	0	0	0	0
Class TB + Group 2.	Quiescent .....	2	0	0	4	0	0	3	2	0	1	0	0	12
	Improved .....	2	1	0	4	1	0	6	2	1	2	1	0	20
	No material improvement .....	0	0	0	0	0	0	0	2	0	0	0	0	2
	Died .....	0	0	0	0	0	0	0	0	0	0	0	0	0
Class TB + Group 3.	Quiescent .....	0	0	0	0	0	0	0	0	0	0	0	0	0
	Improved .....	1	0	0	0	0	0	1	2	0	1	0	0	5
	No material improvement .....	2	0	0	2	1	0	1	1	0	1	0	0	8
	Died .....	1	0	0	0	0	0	1	1	0	0	0	0	3

In 47 out of 77 men discharged, the disease was quiescent = 61.04 %. In 43 out of 61 women discharged, the disease was quiescent = 70.05 %. Of the 4 children discharged, 2 were quiescent.

The percentage of cases quiescent on discharge shows an increase over the 1927 results.



*Classification on admission of cases discharged during 1928.*

<i>Classification.</i>	No.	%	M.	F.	Tubercle Bacilli.		M.	F.	M.	F.
					Positive.	Negative.				
Early .....	37	26.1	18	19	4	0	14	19		
Intermediate .....	102	71.8	58	44	24	12	34	32		
Advanced .....	3	2.1	3	0	3	0	0	0		

Tubercular complications presented by the patients were :—Larynx, peripheral glands, abdomen, bronchitis, fistula in ano, bronchitis and emphysema.

A considerable number of patients received dental treatment under the National Health Insurance Scheme. This treatment was recommended by one of the County Dental Officers who visited the Sanatorium regularly. The majority of the patients admitted to the sanatorium are insured.

The very severe weather we have experienced has emphasized the great necessity for the provision of some form of central heating at this institution. If a boiler were installed under the main building, this would provide heating and hot water, which would be a great saving.

Pigs and Poultry keeping was started at the beginning of the year, the stock being looked after by the patients under the supervision of the gardener. Besides providing the institution with a supply of eggs, it is also a means of training for some of the patients whilst the sale of pigs has produced a substantial profit. The manure from the pigs is also very useful for the garden.

The two acres taken over from the tenant of Pepperhill Farm have been cultivated and we have grown sufficient potatoes and vegetables to supply the institution all the year round, as well as selling some green vegetables which were not required for the Sanatorium.

Numerous gifts have been received for the patients and have been very much appreciated, whilst concert parties, billiard matches and whist drives have been held from time to time.

I should like to express my appreciation of the great help I have received from the Matron and nursing staff and from the engineering and gardening staff.

### **Treatment with Artificial Light.**

This work is being carried out under Tuberculosis, Education, and Maternity and Child Welfare Schemes, so is most conveniently described separately. Four light treatment centres were in use during most of 1928. The centre at Minehead was opened September 13th, 1928. The medical treatment is under Dr. Short and other Medical Officers, but the care of the apparatus and the actual giving of treatment is under Miss Palmer, a whole time Nurse on the staff of the County Council, with special experience of this work.

The cases treated, and results obtained, are shown in the following two tables :—

TABLE XVIII.

CENTRE.	Number of clinics held.	New cases seen.	TOTAL ATTENDANCES.				
			Infant.	Educa- tion.	Tuber- culosis.	From Outside areas.	All.
Bridgwater	91	46	739	214	205	37	1195
Minehead	28	17	152	11	1	0	164
Weston-super-Mare	90	32	70	825	156	32	1053
Yeovil	96	76	287	1301	174	0	1762
TOTAL	305	171	1248	2351	536	69	4174

TABLE XVIX.

	TUBERCULOSIS.						RICKETS.	DEBILITY AND MALNUTRITION.	GLANDS (Not T.B.).	OTHERS.	TOTAL (all cases).
	Lungs.	Glands.	Abdomen.	Bones & Joints.	Other forms.	TOTAL.					
Cured or improved	—	7	2	2	7	18	23	43	6	39	129
I.S.Q.	—	—	1	—	1	2	—	2	—	8	12
Worse	—	—	—	—	—	—	—	—	—	—	—
Still under treatment	—	11	5	3	1	20	39	53	13	59	184
TOTAL	0	18	8	5	9	40	62	98	19	106	325

The average duration of treatment for a full course has been found to be about 40 exposures.

The cost of treatment for 1928, with salaries and travelling expenses, was £392. It is hoped to increase the number of lamps and gradually make light treatment facilities part of the ordinary equipment of each dispensary. The absence of electric current prevents some clinics being utilised.



## MATERNITY AND INFANT WELFARE.

**Rate of Infantile Mortality.** This is the number of deaths under one year of age per 1,000 births. For 1928 it was 45.20. This is the lowest on record for the County and is an extremely satisfactory figure. The rate in the rural areas is only 42.88, by far the lowest recorded. In the urban areas it is slightly higher, i.e., 48.80.

The Urban and Rural Rates are shown in Table II. and the causes of the 269 deaths in Table A (at end of the Report).

Table XX shows the months of death. These figures do not exactly correspond with those in Table A, as the latter is taken from the Registrar General's figures, and this Table is from figures given by the District Medical Officers of Health, obtained from the local Registrars.

This Table shows that 140 of the 268 deaths under one year of age took place before the child was a month old. This is 52 per cent., and of these, 72 per cent. took place before the infant was a week old. In other words, a large proportion of the deaths are pre-natal in origin and illustrates the importance of pre-natal work. The very low infantile mortality rate is realized when it is stated that of the babies which survive the first month, all but one in 50 live at least beyond their first birthday.

**The Midwifery Service.** The number of certified midwives who gave notice of their intention to practise during 1928 was 314, consisting of 306 trained and 8 "bona-fide" midwives.

The percentage of 1928 births in the County attended by trained midwives as midwives was 56.6, by bona-fide 0.8, the remaining 42.6 per cent. being, for the most part, attended by medical men, a small but uncertain proportion being attended by uncertified women.

The proportion of cases taken by trained midwives steadily increases. For example, 12 years previously (1916) the trained midwives attended 35.3, the bona-fide 7.7 per cent. and the doctors' cases were 57 per cent. It is fitting and necessary therefore that more and more attention should be paid to the training and supervision of midwives.

During the year 1039 visits of inspection were made to trained midwives and 21 visits to bona-fide midwives, representing an average of 4 visits to each trained and 3 visits to each bona-fide midwife.

### *Summary for all Midwives during the year.*

			<i>Trained.</i>	<i>Bona-fide.</i>	<i>Total.</i>
Cases attended as Midwife	.....	.....	3370	45	3415
Cases attended as Monthly Nurse	.....	.....	1307	27	1334
Doctor sent for for Mother	.....	.....	783	7	790
Doctor sent for for Child	.....	.....	146	0	146
Still Births	.....	.....	86	1	87
Death of Mother	.....	.....	6	0	6
Death of Child	.....	.....	20	0	20

A doctor was called in under Section 14 of the Midwives' Act in 27.6 per cent. of their cases by the trained and in 15.3 per cent. of cases by the bona-fide midwives. For both classes of cases this was 27.4 per cent.

During the year 746 doctors' accounts were paid under the contributory scheme, at a cost of £1,111 3s. 0d., while the contributory fees were £690 10s. 0d., the deficit payable by the County Council being £420 13s. 0d. The average doctor's fee per case was £1 10s. 0d. Fees amounting to £94 5s. 6d. were paid in 63 cases not coming under the scheme, and of this £44 17s. 9d. was recovered. Apart from Central Office Expenses, the cost of working this section of the Midwives' Act for 1928 was, therefore, £470 0s. 9d. This is £14 15s. 9d. more than in the previous year.

**Maternal Mortality.** This is included in two groups in the Registrar General's returns and is so included in Tables A. and B. The two groups are "Puerperal Sepsis" and "Other Accidents and Diseases of Pregnancy and Parturition."

The deaths from these causes since 1910 are shown in the following Table. :—

**MATERNAL DEATHS—ADMINISTRATIVE COUNTY OF SOMERSET.**

	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
Puerperal Sepsis .....	7	8	9	8	1	5	7	4	8	6	9	5	2	4	5	10	6	12	14
Other Accidents and Diseases of Pregnancy and Parturition .....	35	13	17	20	21	18	24	17	20	9	21	22	15	13	19	16	15	11	12
Total .....	42	21	26	28	22	23	31	21	28	15	30	27	17	17	24	26	21	23	26
Rate per 1,000 Births .....	4.96	2.53	3.48	3.72	3.13	3.41	4.65	3.90	5.14	2.64	3.63	3.60	2.45	2.49	3.69	4.21	3.46	3.83	4.36

While considerable fluctuations occur, there is no decided fall in this rate and it must be considered unsatisfactory. The rate in Somerset is rather below that for the country generally and the reduction of these maternal deaths is a national problem which is receiving much attention.

A special inquiry is being made into each maternal death but this was not commenced until the end of the year. These inquiries are intended for investigation purposes only, in order to ascertain the important factors in maternal mortality with the aim of reducing the present high rate. The reports, as they are made, are sent to the Ministry of Health. They are not directed to any question of responsibility and may not be used for that purpose administratively.

During the year 25 cases of Puerperal Fever and 83 cases of Puerperal Pyrexia were notified. Arrangements have been made with different Hospitals to take in County cases and facilities are offered. During 1928 twelve cases were so admitted. The Hospitals with which arrangements have been made are the following :—

Bath Royal United Hospital, Bridgwater Hospital, Bristol Royal Infirmary, Chard Hospital, Minehead Isolation Hospital, Wells Hospital, Yeovil Hospital.

**Ophthalmia Neonatorum.** During the year 34 cases were notified. The distribution of the cases is shown in Table V. Of these cases, one baby died within 3 days. Under the Public Health (Ophthalmia Neonatorum) Regulations 1926, 4 cases were sent to Hospital under the County Council scheme and in 1 case a special nurse was supplied.

All the cases are followed up for long periods, to ascertain if there is any impairment of vision. All but two cleared up completely. In one case the requirements of notification were overlooked and it was only notified to us on January 24th, the onset being January 10th. The case was treated at home until January 27th then sent to the Bristol Eye Infirmary. There is some permanent loss of vision in one eye. The other was a very severe case admitted to the Taunton Isolation Hospital about 5 days after onset. The mother refused to stay in Hospital until treatment was completed and further treatment had to be given at home. Slight impairment of vision was left.

Last year I was able to report that there was complete recovery without any eye damage in all the 30 cases.



**Nursing and Maternity Homes.** The Nursing Homes Registration Act 1927, which came into force July 1st, 1928, extended the registration of Maternity Homes to Nursing and Maternity Homes. The term "Nursing Home" means any premises used or intended to be used for the reception of and the providing of nursing for persons suffering from any sickness, injury or infirmity, and includes a maternity home but does not include hospitals maintained or controlled by a Government Department or local authority, or institutions for lunatics or institutions under the Mental Deficiency Act 1913.

The definition is a wide one and under it we have had to consider a great variety of applications. Each application requires careful consideration and a special visit with detailed inquiries as to the character of the accommodation, the personnel, and the classes of cases proposed to be nursed. This has involved much work which at present is done by Dr. Halliday, Miss Gane and myself. Periodical re-visits have to be paid from time to time.

At the end of April, 1929, the number of homes on the Register was 22. Of these, 8 were Maternity Homes alone, the other 14 nursing homes not mainly or not at all taking maternity cases.

No fresh exemptions were granted during the year but two applications were rejected as unsuitable.

Certain requirements as regards keeping of records, notification of infectious disease, etc. were made obligatory before registration was granted and it was not considered necessary to make special bye-laws.

**Milk Grants.** Throughout the year milk was granted to necessitous cases under the Milk (Mothers and Children) Orders of the Ministry of Health. Grants were made to 2,073 cases at an estimated cost of £593. Last year £578 was spent.

The grants were carefully made and supervised, and given as allowances for specific public health purposes. Of the grants made about 25 per cent. were to expectant mothers, 46 per cent to nursing mothers, and 29 per cent. to children under five years of age. Great care is taken to prevent abuse and to see that the milk is taken only by the person for whom it is intended.

**Ante-Natal Work.** As mentioned in earlier reports, this is now an important part of the work. Ante-natal cards are supplied to all the midwives upon which to record their visits before birth, and the results of those visits. Arrangements are available for the examination of urine and other specimens in the County Laboratory free of cost to midwives. Leaflets to expectant mothers are supplied and distributed. Special attention is paid to granting milk to expectant mothers. Steady and satisfactory progress is being made.

**Work of Infant Visitors.** The work has been on the same lines as in previous years.

The births during 1928 were referred for visits as follows :—

			Rural.	Urban.	Total.
Whole-time County Staff	.....	.....	265	360	625
District Nurses	.....	.....	3202	1071	4273
			<hr/> 3467	<hr/> 1431	<hr/> 4898

Special supervision is given to illegitimate children, while all the Infant Visitors are instructed to give their chief attention to the cases which, from their earlier visits, they find need special attention. Some cases, for example, are visited only every 3 to 4 months, others perhaps twice a month.

Supervision is continued for all children to the end of their second year and for those found to require it, up to school age.



TABLE XX.  
DEATHS UNDER 1 YEAR OLD.

URBAN.	Under 1 week.	1—4 weeks (inclusive)	Total under 1 month.	1—6 months.	6—12 months.	Total Deaths under 1 year.	RURAL.	Under 1 week.	1—4 weeks (inclusive).	Total under 1 month.	1—6 months.	6—12 months.	Total Deaths under 1 year.
Bridgwater .....	4	1	5	2	1	8	Axbridge .....	4	5	9	4	6	19
Burnham .....	1	2	3	1	2	6	Bath .....	3	2	5	1	5	11
Chard .....	0	0	0	0	0	0	Bridgwater .....	7	3	10	3	2	15
Clevedon .....	1	0	1	1	2	4	Chard .....	4	0	4	1	2	7
Crewkerne .....	1	0	1	0	0	1	Clutton .....	3	1	4	4	3	11
Frome .....	3	2	5	1	1	7	Dulverton .....	0	1	1	5	0	6
Glastonbury .....	0	0	0	1	1	2	Frome .....	5	0	5	4	2	11
Highbridge .....	0	0	0	1	1	2	Keynsham .....	2	2	4	3	2	9
Ilminster .....	0	0	0	2	0	2	Langport .....	0	0	0	2	1	3
Midsomer Norton .....	1	0	1	1	1	3	Long Ashton .....	6	0	6	3	1	10
Minhead .....	5	0	5	2	0	7	Shepton Mallet .....	1	0	1	1	1	3
Portishead .....	4	0	4	1	2	7	Taunton .....	4	3	7	1	0	8
Radstock .....	2	0	2	1	0	3	Wellington .....	0	0	0	0	1	1
Shepton Mallet .....	1	0	1	1	0	2	Wells .....	2	2	4	3	1	8
Street .....	0	1	1	2	1	4	Williton .....	2	1	3	1	6	10
Taunton .....	7	4	11	9	5	25	Wincanton .....	8	1	9	2	1	12
Watchet .....	0	0	0	0	0	0	Yeovil .....	5	4	9	1	1	11
Wellington .....	0	2	2	1	1	4							
Wells .....	3	1	4	2	0	6							
Weston-super-Mare .....	6	0	6	2	2	10							
Wiveliscombe .....	1	0	1	0	0	1							
Yeovil .....	5	1	6	1	2	9							
Totals	45	14	59	32	22	113	Totals	56	25	81	39	35	155

**Infant Welfare Centres.** At the end of 1928 the Centres in the County, exclusive of those at Yeovil, Taunton and Weston-super-Mare which are outside the County Scheme, so far as I am aware, were :—

Centre.	Day of week opened.	Frequency of Meetings.
Bridgwater .....	Friday .....	Every week.
Bruton .....	Tuesday .....	Alternate weeks.
Chard .....	Friday .....	1st and 3rd Friday in every month.
Clevedon .....	Thursday .....	Every Thursday except 1st in month. Doctor last Thursday each month.
Crewkerne .....	Tuesday .....	Alternate weeks.
Frome .....	Tuesday .....	Every week.
Harptree .....	Thursday .....	Alternate weeks.
Long Ashton .....	Monday .....	Alternate weeks.
Oare, Culbone, etc. ....	—	—
Pill .....	Wednesday .....	1st and 3rd Wednesday in every month.
Portishead .....	Friday .....	Alternate weeks.
Shepton Mallet .....	Friday .....	Alternate weeks.
Street .....	Wednesday .....	Every week for weighing. Once a month Doctor's consultation.
Wellington .....	Thursday .....	Every week. 1st Thursday Doctor's day.
Wells .....	Tuesday .....	2nd and 4th Tuesday in every month.
Wraxall .....	Friday .....	1st and 3rd Friday in every month.

Valuable work is being done at these Centres, but the attendance at many of them is not large. Except Bridgwater none are being worked through the County Council, but its Officers are in touch with all of them and, as far as possible, a close connection is maintained between the work of the Centre and the home visits paid by the County Council Staff. When the Local Government Act, 1929, becomes operative their association with the County work will be much closer.

**Bridgwater Infant Welfare Work.** The following gives some particulars of the work.

*Births.* During 1928 the number of births notified was 334, of these 242 were attended by midwives. A doctor was called in to help the midwife in 62 cases. 8 babies died during the year, a rate of 29.4 deaths per 1,000 births.

<i>Home Visiting.</i>	No. of children on visiting list	.....	908
	No. of first visits paid	.....	303
	Total visits paid to infants	.....	2956
	Total visits paid during 1928	.....	3341

*Milk Grants.* 43 grants were made, at an estimated cost of £106. As far as possible it is made a condition that cases receiving milk attend at the Centre so that the benefit of the grants can be estimated. Were it not for the milk grants a very considerable number of mothers would be unable to breast feed who now do so.

<i>Centre.</i>	Number of individual children who attended the centre	.....	345
	Number of individual mothers who attended the centre	.....	247
	Average weekly attendance of babies and other children	.....	70
	Average weekly attendance of mothers	.....	43.3
	Total number of attendances (children, 2328, mothers, 1448)	.....	3776
	Total number of medical consultations for infants	.....	1026
	Total number of medical consultations for women (excluding ante-natal)	.....	125

The medical work was carried out by Dr. Symons until the end of March, then by Dr. Halliday.

The attendances at lectures and talks have fallen off considerably, and during the year averaged an attendance of only 22.

*Ante-Natal Work.* This was carried on throughout the year both by home visits and by inviting attendance at the Ante-natal Centre once a month. The total attendances were 76, with 43 women attending.

There is a very helpful Voluntary Committee which provides voluntary workers for the Centre. Virol, Dried Milk, and Feeding Bottles are supplied at the Centre at cost price; suitable cases are helped out of local funds.

The work at the Centre and in the homes is undoubtedly bearing fruit, there is a higher standard of infant care and more interest is being taken by mothers in mothercraft. Miss Goddard's work has been most devoted, but the work has been handicapped by her unavoidable absence for part of the year. The Local Committee and Voluntary Staff of the Welfare Centre have been very helpful and have given up much time to the work.

**Baby Hospital, Bridgwater.** This Hospital has continued to be very useful and valuable. Undoubtedly the lives of a number of babies have been saved, while other infants have been restored to health in a much shorter time than would have been the case at home.

At the beginning of 1928, there were five babies in the Ward, while during 1928 twenty-one cases were admitted. Five of these 26 cases died in Hospital, 3 a few days and 2 two weeks respectively after admission. The other 21 cases were discharged in 1928 or 1929, greatly improved in health, most being normal or nearly normal babies, except one admitted to Bath Orthopaedic Hospital, and 5 kept under special observation.

**Rickets.** The problem of rickets in rural areas is a very different one from that in crowded urban districts. Infant Welfare Centres are not available in most places and the mothers often will not bring the children, even if Centres are available. The cases can only be dealt with by means of visits to the homes. A different procedure has therefore to be devised in rural areas for ascertainment and for the provision of treatment.

The County scheme was started in May, 1926, and was very fully described in my Annual Report for last year. It is only necessary here to give some figures as to its further working.

The fresh cases or suspected cases reported during 1928 were 212. Of these 13 were excluded as not rickets, while 4 were not active rickets but the late results of rickets and were transferred to the Orthopaedic scheme. Of the 1927 cases, 46 recent cases, i.e. treatment commenced after September 1st, 1927, have to be included to study the results of the treatment given. This makes 241 cases under consideration.

These are classified as follows :—

- A. Definite well marked clinical rickets.
- B. Less definite but apparently true rickets.
- C. Mal-nourished children with doubtful evidence of rickets.

The results of treatment to the end of 1928, judged from the facts recorded on the register forms, were as follows :—

TABLE XXI.

RESULTS OF TREATMENT.	A.	B.	C.	TOTAL.
Cured .....	4	12	8	24
No further treatment required and only kept under supervision .....	9	23	10	42
Greatly improved but still under treatment .....	4	20	11	35
Improved—still under treatment .....	7	19	11	37
No visible improvement .....	4	4	6	14
Recent cases still under treatment .....	11	30	24	65
Died .....	0	1	0	1
Left the County .....	0	0	4	4
Definite deformity the main defect and transferred to Orthopaedic Scheme .....	12	6*	1*	19
<b>Totals .....</b>	<b>51</b>	<b>115</b>	<b>75</b>	<b>241</b>

\*Cases of knock-knee or flat foot, due more to poor musculature than to actual bone deformity.



The "recent cases still under treatment" includes all cases the treatment of which was commenced within 4 months of the end of the year, i.e., all cases reported after September 1st, 1928.

These results may be considered very satisfactory. Excluding the recent cases, the 1 death and the 4 who left the County, the figures show 14.0 per cent. cured, 24.6 per cent. practically cured, 42.1 per cent. improved but still under treatment and only 19.3 per cent. with no visible improvement or with definite deformity necessitating transfer to the Orthopaedic Clinic.

The table given in last year's Report left 108 children still under treatment at the end of 1927. All these cases have been on our Rickets register and under treatment. The results as regards these 108 cases are shown in Table XXII.

TABLE XXII.

Cases still under Treatment at the end of 1927.

Results of Treatment.	Reported at end of 1927 as:—			
	Greatly improved still under treatment. 56	Improved still under treatment. 40	No visible improvement 12	Total. 108
Cured .....	31	18	2	51
No further treatment required, and only kept under supervision .....	10	3	1	14
Improved ; still under treatment .....	5	8	1	14
No improvement .....	0	1*	3	4
Died .....	0	0	1	1
Left the County .....	1	1	1	3
Transferred to Orthopaedic Scheme .....	1	3	2	6
Of School age, and referred for special attention of School Medical Inspector	8	6	1	15
	56	40	12	108

\* Notified as Tubercular peritonitis.

*Distribution of the Cases.* The distribution of the cases accepted for treatment, with a few which were rejected after further supervision, is shown in the following Table :—

TABLE XXIII.

<i>Urban District.</i>			<i>Cases Reported.</i>	<i>Rural District.</i>			<i>Cases Reported.</i>
Bridgwater	.....	.....	10	Axbridge	.....	.....	3
Burnham	.....	.....	1	Bath	.....	.....	27
Chard	.....	.....	1	Bridgwater	.....	.....	12
Clevedon	.....	.....	7	Chard	.....	.....	7
Crewkerne	.....	.....	2	Clutton	.....	.....	14
Frome	.....	.....	10	Dulverton	.....	.....	8
Glastonbury	.....	.....	1	Frome	.....	.....	2
Highbridge	.....	.....	0	Keynsham	.....	.....	5
Ilminster	.....	.....	0	Langport	.....	.....	2
Midsomer Norton	.....	.....	0	Long Ashton	.....	.....	8
Minehead	.....	.....	1	Shepton Mallet	.....	.....	5
Portishead	.....	.....	4	Taunton	.....	.....	18
Radstock	.....	.....	5	Wellington	.....	.....	11
Shepton Mallet	.....	.....	0	Wells	.....	.....	5
Street	.....	.....	2	Williton	.....	.....	11
Taunton	.....	.....	—*	Wincanton	.....	.....	8
Watchet	.....	.....	3	Yeovil	.....	.....	13
Wellington	.....	.....	2				
Wells	.....	.....	3				
Weston-super-Mare	.....	.....	—*				
Wiveliscombe	.....	.....	1				
Yeovil	.....	.....	—*				
Total			53	Total			159

\* Separate Maternity and Child Welfare Authorities.

This Table includes a certain number of cases afterwards excluded as not rickets, so it does not correspond accurately with Table XXI which shows the results of treatment.

While this Table is interesting, it cannot be accepted as an accurate representation of the distribution of rickets throughout the County. The disease is an indefinite one in the earlier stages and therefore the degree of notification will in fact turn to some extent upon the alertness of the Infant Visitors and the special attention they give to this condition.

Experience with the rickets scheme has shown that it is sometimes difficult for the Infant Visitors to discriminate between true rickets and other abnormalities of childhood. It has also become obvious that these other abnormalities require special attention which is not always being obtained. At the end of the year the County Council decided to extend the scheme and to bring these children under review. Arrangements to that end have been brought into use from April 1st, 1929, and will be dealt with in next year's Report. This has only become possible through the appointment of Dr. Hilda Halliday as Medical Officer in April, 1928. The reports on all rickets and other abnormal children now go to her and she arranges for appropriate action.

**Part I. Children Act, 1908.** Under this Act the supervision of boarded out children is arranged for by Boards of Guardians. It is an advantage if the supervision of the children under 7 years of age is carried out by the Health Visitors. This is done without charge at the request of the Board of Guardians in eight unions, i.e., Bridgwater, Chard, Clutton, Keynsham, Langport, Shepton Mallet, Williton, and Wincanton. Periodical reports are furnished to the different Boards of Guardians on forms provided by them.

### ORTHOPAEDIC SCHEME.

The County Scheme and the results of working during 1928 are described in considerable detail in my Report for 1928 as School Medical Officer.

The new cases seen and dealt with through the Clinics were as follows :—

#### Cases seen at the Clinics.

Tuberculosis of bones and joints	.....	.....	.....	.....	11
Spastic paraplegia	.....	.....	.....	.....	11
Infantile paralysis (polio-myelitis)	.....	.....	.....	.....	19
Osteo-myelitis	.....	.....	.....	.....	4
Congenital dislocation of the hip	.....	.....	.....	.....	6
Club foot	.....	.....	.....	.....	30
Claw foot	.....	.....	.....	.....	2
Rickets	.....	.....	.....	.....	105
Knock knees (mostly old rickets)	.....	.....	.....	.....	41
Scoliosis	.....	.....	.....	.....	6
Torticollis	.....	.....	.....	.....	6
Diseases and injuries of the toes	.....	.....	.....	.....	7
Postural deformities :—					
General defects of posture	.....	.....	.....	.....	107
Flat foot (often with other postural deformities)	.....	.....	.....	.....	45
Kyphosis	.....	.....	.....	.....	1
				—	153
Other defects and deformities	.....	.....	.....	.....	39
				—	440
				—	

Many of the old long standing cases have been dealt with and now a much larger percentage of the cases come to the Clinics in the comparatively early stages of crippling.



## HEALTH PROPAGANDA.

Miss Hobbs, the Health Propaganda Officer, resigned in the summer, her resignation taking effect at the end of July. The post was not filled until the beginning of the next year so that the work of this Officer only included a period of 7 months.

The Infant Welfare Exhibition, in its greatly improved and extended form, was held at three Centres during the year, i.e., at Long Ashton, Portishead and Clevedon with, on the whole, good attendances. Twenty-six talks to mothers were given at 6 different Infant Welfare Centres.

A Health Exhibition was held for two days at Bridgwater on June 7th and 8th, in conjunction with the Bridgwater Young Citizens' Week. A large number of health talks were given to children from the Secondary and Elementary Schools, to mothers and others. A special feature was made of food exhibits and suitable meals for children. This was done in co-operation with Miss Peake and the local Domestic Subjects teachers.

Great attention was paid to the school side of propaganda work. A special course was arranged for teachers, consisting of 9 lectures on Physiology and Hygiene. This course was given at the following centres :—

Clevedon	(Average attendance	12)
Highbridge	(	21)
Chard	(	32)
Langport	(	24)

A large number of posters and diagrams were obtained and made available, while lantern slides were shown at most of the lectures. The whole course was made as practical as possible and to bring out the kind of instruction to be given on hygiene to school children. Lists of suitable books and posters were made out and can be obtained by Head Teachers through the County Education Office. It is anticipated that Teachers who have attended this course will be able to give, or greatly improve, hygiene instruction to the children in their schools.

Most teachers welcome short talks on health matters to the children, and the opportunity of being in the district often enables such a talk to be given. Eighty such talks were given during the year.

Model garments for babies and toddlers have been loaned to several teachers for instruction to their girls and have been shown to the teachers attending the County Teachers' Needlework instruction classes.

Six lectures on Venereal Diseases and social hygiene have been given, most of which were to teachers.

Lectures have also been given to other bodies, Women's Institutes, Girl Guides, etc., but these are fewer than in the previous year, only 12 being given.

A good deal has also been done as regards the sale or distribution of health leaflets. For example, 258 "Square Meal" Cards, 215 Mother's Cookery Book and 83 copies of the leaflet "To Mothers and Fathers" have been sold.

The Health and Cleanliness Council have continued to supply free painting books for distribution to school children in the schools where Health Talks have been given and 1,000 of these were distributed during the year. In addition, 500 calendars and 1,000 postcards, suitable for Health Propaganda, also supplied free by the above Council, have been given away in selected schools and to children attending the County Health Exhibitions.

The stock of leaflets, posters and lantern slides has been added to considerably during the year. The Health Exhibition has been extended but we have very inadequate space for storage and in consequence, considerable time is wasted in picking out requirements for individual lectures or meetings.

The above is a short account of work done mainly by Miss Hobbs. In addition, a very great deal of propaganda work is carried out by the County Health Department as part of its ordinary routine work by all its Officers. This especially applies to tuberculosis, infant welfare work, and some aspects of school hygiene.

## SECTION III. GENERAL SANITARY ADMINISTRATION.

**WATER SUPPLIES.**

The responsibility for ascertaining that a pure and adequate supply of water is available rests upon the Local Sanitary Authorities and County Councils have little or no powers.

While most of the Urban Districts have good supplies, the water supply in many rural parishes leaves much to be desired, and progress in obtaining a good water supply is very slow.

There is very little to report fresh as regards water supplies. A few districts have improved their supplies, others have had questions of water supply under consideration. The County Council has been pressing for many years for an adequate supply for certain parishes, including Huish Episcopi, Aller, Wedmore and Banwell, but except for Wedmore, little or nothing has been accomplished. For Wedmore a definite scheme has been adopted.

**RIVER POLLUTION AND SEWERAGE.**

No trouble was experienced during the year from the effluent from Milk Depots, while many of the sewage disposal works in the County were visited during the year. The majority are working fairly well but, as regards the smaller installations, some were not being looked after properly. Only three had to be brought to the notice of the Public Health Committee.

38 samples of sewage, effluents, etc. were examined in the County Laboratory.

Trouble from effluents from manufacturing processes are rare in the County and while several had to be dealt with, it was not necessary to report any to the Council for legal action.

**ADMINISTRATION OF THE HOUSING ACTS.**

A very detailed report on the subject of housing, particularly dealing with housing construction since the War was given in my Report for last year so the subject is not dealt with in detail in this Report.

The following shows the housing construction since 1921 :—

	Urban.	Rural.	Total.
1921	493	685	1178
1922	395	637	1032
1923	279	375	654
1924	432	551	983
1925	581	812	1393
1926	974	1217	2191
1927	1393	1442	2835
1928	944	718	1662

These figures show that after the considerable quantity of houses constructed under the original Government Scheme, all the cost of which above the produce of a 1d. rate was met by the Treasury there was a marked diminution in the number of houses being built. 1925 showed a great improvement, while the increase in 1926, and again in 1927, was very marked, noticeable in both rural and urban areas. For 1928 there is a decline, but the total is still very considerable.

Table XXIV. shows that much of the diminution in 1928 is due to cessation of building by the Local Authorities, probably in part associated with a reduction of the subsidy. I have no information to say if this was under the 1923 or 1924 Housing Acts. The estimated increased population over the previous year is 3,750 and if we allow 5 persons per house, this means that only 750 houses are required for the increased population. The figure of 1,662 allows something towards the reduction of housing shortage and to enable unfit houses to be closed.

Table XXIV. sets out the new houses erected during the year in the individual districts. It shows very unequal construction in the various areas, particularly in different rural areas.

Table XXV. shows that 91 houses were closed as unfit during the year, the figure for the previous year being 89. This is a very small proportion of those which are unfit but which are not being dealt with for economic reasons. Houses found defective but not unfit for habitation numbered 2,630. Only 2,920 houses were inspected under the Housing Acts during the year, a small and inadequate number.

#### *HOUSING (RURAL WORKERS) ACT, 1926.*

Up to 31st December, 1928, grants were authorised by the County Council under this Act in respect of 38 dwellings, amounting to £3,537 : 13 : 4 (including £573 : 6 : 8 in respect of six dwellings authorised in October, 1927, but not paid prior to 1st January, 1928,) in the following areas :—

<i>Rural District.</i>				<i>No. of dwellings.</i>	<i>Amount.</i>		
					£	s.	d.
Bridgwater	.....	.....	.....	2	200	0	0
Chard	.....	.....	.....	5	500	0	0
Clutton	.....	.....	.....	5	410	0	0
Langport	.....	.....	.....	14	1323	6	8
Shepton Mallet	.....	.....	.....	2	200	0	0
Taunton	.....	.....	.....	1	99	6	8
Williton	.....	.....	.....	3	205	0	0
Wincanton	.....	.....	.....	2	200	0	0
Yeovil	.....	.....	.....	4	400	0	0
				38	£3537	13	4

Of the grants authorised as above, £1,937 : 13 : 4d. was paid in respect of 22 dwellings during the year 1928 ; the applications in respect of 5 dwellings amounting to £500 were not proceeded with by the applicants ; and in the remaining cases the works were not completed, and therefore the grants were not paid during the year 1928.



TABLE XXIV.

NUMBER OF NEW HOUSES ERECTED DURING THE YEAR.

AREA.	With State assistance.		Otherwise	Total.
	By the Local Authority.	By other bodies or persons.		
RURAL.				
AXBRIDGE .....	30	4	64	98
BATH .....	0	6	31	37
BRIDGWATER .....	0	25	29	54
CHARD .....	2	0	4	6
CLUTTON .....	0	10	13	23
DULVERTON .....	0	1	4	5
FROME .....	0	2	2	4
KEYNSHAM .....	0	0	104	104
LANGPORT .....	28	3	12	43
LONG ASHTON .....	0	2	110	112
SHEPTON MALLET .....	0	5	5	10
TAUNTON .....	0	35	0	35
WELLINGTON .....	4	2	1	7
WELLS .....	0	0	13	13
WILLITON .....	0	5	22	27
WINCANTON .....	20	7	2	29
YEOVIL .....	66	2	43	111
All Rural Areas	150	109	459	718
URBAN.				
BRIDGWATER .....	12	13	4	29
BURNHAM .....	0	1	31	32
CHARD .....	0	7	0	7
CLEVEDON .....	36	42	29	107
CREWKERNE .....	12	2	1	15
FROME .....	31	2	3	36
GLASTONBURY .....	0	4	9	13
HIGHBRIDGE .....	0	0	1	1
ILMINSTER .....	0	11	0	11
MIDSOMER NORTON .....	0	19	4	23
MINEHEAD .....	0	0	69	69
PORTISHEAD .....	0	0	3	3
RADSTOCK .....	0	5	0	5
SHEPTON MALLET .....	0	0	3	3
STREET .....	0	8	2	10
TAUNTON .....	128	25	24	177
WATCHET .....	16	12	4	32
WELLINGTON .....	14	3	8	25
WELLS .....	0	0	6	6
WESTON-S-MARE .....	69	0	103	172
WIVELISCOMBE .....	0	0	0	0
YEOVIL .....	170	0	14	184
All Urban Areas	488	154	318	960
County	638	263	777	1678

TABLE XXV.  
HOUSING INSPECTIONS.

Area.	Houses inspected for housing defects.	Houses specially inspected under Housing Acts.	Number Found unfit.	Number defective but not unfit.	Houses Closed as unfit.
RURAL.					
AXBRIDGE .....	157	4	0	38	0
BATH .....	84	32	10	51	6
BRIDGWATER .....	214	76	2	62	2
CHARD .....	110	110	11	56	6
CLUTTON .....	195	48	0	43	0
DULVERTON .....	36	22	2	2	1
FROME .....	105	60	12	17	0
KEYNSHAM .....	67	36	1	47	0
LANGPORT .....	195	0	9	145	9
LONG ASHTON .....	177	46	12	34	12
SHEPTON MALLET .....	112	82	0	16	0
TAUNTON .....	557	557	0	427	0
WELLINGTON .....	105	45	1	28	0
WELLS .....	55	0	5	16	1
WILLITON .....	93	18	5	13	2
WINCANTON .....	216	216	13	157	10
YEOVIL .....	233	149	9	48	9
All Rural Areas.	2,711	1,501	92	1,200	58
URBAN.					
BRIDGWATER .....	214	90	41	192	4
BURNHAM .....	12	0	0	12	0
CHARD .....	119	73	0	41	3
CLEVEDON .....	25	0	10	15	0
CREWKERNE .....	3	172	13	100	3
FROME .....	287	114	0	263	0
GLASTONBURY .....	193	166	0	43	0
HIGHBRIDGE .....	150	0	4	12	0
ILMINSTER .....	36	36	0	16	0
M'SOMER NORTON .....	30	0	0	0	0
MINEHEAD .....	27	16	1	14	1
PORTISHEAD .....	19	11	2	3	2
RADSTOCK .....	45	0	7	36	0
SHEPTON MALLET .....	105	64	0	15	1
STREET .....	13	10	5	3	0
TAUNTON .....	735	239	11	242	11
WATCHET .....	60	0	0	10	0
WELLINGTON .....	150	150	2	67	1
WELLS .....	15	0	0	8	0
WESTON-S-MARE .....	506	100	1	197	1
WIVELISCOMBE .....	115	2	1	66	0
YEOVIL .....	176	176	15	75	6
All Urban Areas.	3,062	1,419	113	1,430	33
County.	5,773	2,920	205	2,630	91

## SUPERVISION OVER THE FOOD SUPPLY.

A. **Slaughter Houses and Meat Supervision.** The Public Health (Meat) Regulations 1924, came into operation April 1st, 1925. A summary of their requirements was set out in my Report for 1925.

Theoretically these regulations should enable every animal slaughtered for human food to be inspected and passed or rejected for human consumption. In practice this does not by any means occur although the regulations mark a considerable advance in the control over meat.

To enable the inspectors to know the times of slaughter, the Regulations (Sec. 8) provide that either a specific notice of a particular slaughtering has to be given or, where it is the regular practice to slaughter animals at fixed times on fixed days, a general written notice may be given of the fixed times and fixed days. Very considerable laxity has been allowed to grow up as regards the proper interpretation of this requirement and very general notices have been accepted, e.g., that days of killing are on two specified days in the week, without any intimation of time. This has been accepted as adequate, and frequently there has been killing on other days and no notice has been given. Since this sort of thing makes the regulations ineffective, the County Council drew the attention of the Local Authorities to the requirements of this section.

TABLE XXVI.  
SLAUGHTER HOUSES.

Sanitary Area. (Urban).	Licensed.	Registered.	Total.	Sanitary Area. (Rural).	Licensed.	Registered.	Total.
Bridgwater .....	3	11	14	Axbridge .....	21	8	29
Burnham .....	3	0	3	Bath .....	2	11	13
Chard .....	3	1	4	Bridgwater .....	19	6	25
Clevedon .....	—	—	P	Chard .....	6	23	29
Crewkerne .....	0	4	4	Clutton .....	9	15	24
Frome .....	1	7	8	Dulverton .....	3	2	5
Glastonbury .....	2	4	6	Frome .....	12	0	12
Highbridge .....	6	1	7	Keynsham .....	4	8	12
Ilminster .....	2	3	5	Langport .....	13	2	15
Midsomer Norton .....	2	2	4	Long Ashton .....	2	11	13
Minehead .....	—	—	P	Shepton Mallet .....	15	0	15
Portishead .....	2	2	4	Taunton .....	36	0	36
Radstock .....	2	3	5	Wellington .....	7	0	7
Shepton Mallet .....	4	2	6	Wells .....	14	2	16
Street .....	5	0	5	Williton .....	6	6	12
Taunton .....	5	7	12	Wincanton .....	0	18	18
Watchet .....	2	1	3	Yeovil .....	28	0	28
Wellington .....	2	7	9				
Wells .....	5	6	11				
Weston-super-Mare .....	—	—	P				
Wiveliscombe .....	2	0	2				
Yeovil .....	8	0	8				
				Total.	197	112	309
Total.	59	61	120	County Total.	256	173	429

P = Public Slaughter-house.

Table XXVI records the meat condemned during 1928. It will be noted that in a number of areas none, or practically none, was condemned at all. This applies more particularly to some of the Rural districts. In spite of the 1924 Regulations it is not difficult for diseased animals to be killed and unsound meat to be sold for human consumption. Until all slaughter and preparation for sale is carried out in a few properly supervised public abattoirs this possibility will exist.



TABLE XXVII.  
MEAT CONDEMNED DURING 1928.

AREA.	Animals and parts condemned.										
	Pigs.			Oxen and Calves.				Sheep.		Other Animals.	
	Whole Carcase.	Head.	Internal Organs alone.	Whole Carcase.	Fore or Hind Quarters alone.	Head.	Internal Organs alone.	Whole Carcase.	Organs alone.	Whole Carcase.	Organs alone.
URBAN.											
Bridgwater .....	3	16	93	3	7	5	113	18	142	10	0
Burnham .....	0	0	0	0	0	0	0	0	0	0	0
Chard .....	2	7	5	2	3	0	2	1	0	0	0
Clevedon .....	0	0	0	0	0	0	0	0	0	0	0
Crewkerne .....	0	0	0	0	0	0	0	0	0	0	0
Frome .....	7	106	85	1	4	7	31	0	8	0	0
Glastonbury .....	0	7	11	0	0	0	11	0	18	0	0
Highbridge .....	16	133	3490	1	2	0	0	0	0	0	0
Iminster .....	0	2	2	0	0	0	0	0	2	0	0
Midsomer Norton .....	0	0	0	0	2	0	0	0	0	0	0
Minehead .....	0	0	0	0	0	0	0	1	0	0	0
Portishead .....	0	0	0	0	0	0	0	0	0	0	0
Radstock .....	0	0	0	0	0	0	0	0	0	0	0
Shepton Mallet .....	2	10	13	0	0	0	3	0	5	0	0
Street .....	2	12	6	0	2	1	6	1	26	0	0
Taunton .....	26	308	167	9	7	4	15	9	22	0	0†
Watchet .....	0	0	0	0	0	0	0	0	0	0	0
Wellington .....	0	0	0	0	0	0	2	0	0	0	0
Wells .....	0	0	0	0	0	0	0	0	0	0	0
Weston-super-Mare .....	13	152	223	3	6	50	288	24	191	0	0
Wiveliscombe .....	0	0	0	1	0	0	0	0	0	0	0
Yeovil .....	11	58	7	4	7	4	52	1	2	0	0*
RURAL.											
Axbridge .....	0	15	3	6	4	0	22	1	1	0	0
Bath .....	1	1	2	1	2	2	4	0	7	0	0
Bridgwater .....	5	16	11	1	2	11	28	5	10	0	0
Chard .....	0	0	0	1	0	0	0	0	0	0	0
Clutton .....	0	5	1	0	1	0	0	0	0	0	0
Dulverton .....	0	0	0	0	0	0	0	0	0	0	0
Frome .....	0	0	0	1	0	0	0	0	0	0	0
Keynsham .....	3	4	10	16	14	16	136	4	80	0	0
Langport .....	1	12	14	4	2	7	56	6	51	0	0
Long Ashton .....	0	0	0	0	0	0	0	0	0	0	0
Shepton Mallet .....	2	25	6	5	2	0	3	0	0	0	0
Taunton .....	33	47	45	9	4	9	14	2	14	0	0
Wellington .....	0	0	0	0	0	1	2	0	6	0	0
Wells .....	0	1	0	5	5	1	1	0	12	0	0
Williton .....	0	0	0	0	0	0	1	0	0	0	0
Wincanton .....	1	0	2	1	1	0	0	0	0	0	0
Yeovil .....	3	11	26	2	6	5	39	0	5	0	0

† 20 Picnic hams.

\* 23 Tins of Belgian hams.

TABLE XXVIII.

MILK PRODUCERS AND DISTRIBUTORS.

[illegible]

B. **Milk Supply.** Table XXVIII gives the number of producers and distributors registered.

The Milk and Dairies Order 1926 came into operation in October, 1926, and an account of its aims was given in my 1927 Report. Considerable improvements are being effected as the result of the working of the Order, but only very slowly, and in some districts very inadequate attention is being paid to this important work. The educational work also goes on and is making itself felt and this is resulting in higher standards. During the year 40 Clean Milk Demonstrations were given at farms in various parts of the County with an average attendance of 24. Four milkers competitions were also held, with 21 entries. Another Clean Milk Competition, divided into several classes, was held in 1928-29, with considerable influence on clean milk production.

No steps were taken during the year to provide for veterinary inspection of cows, but a number of animals were inspected in connection with herds from which tubercle bacilli were found in the milk.

During the year 274 samples of mixed milk, collected at the cowsheds, were examined for tubercle bacilli: of these, one must be excluded as useless, the guineapigs dying too early for an opinion to be given. Of the remaining 273, virulent tubercle bacilli were found in 6, a percentage of 2.2.

During 1927 the percentage was 2.18 from 230 samples and for 1926 the percentage was 2.2 from 215 samples. These figures are important because they represent quite unselected samples of mixed milk collected from herds at the cowsheds, and are so very consistent. With ordinary samples collected in the large towns the percentage of positive results is very much higher as shown from the following more or less random quotations of samples examined during the year 1927:—Aberdeen 8.3., Birmingham 7.1, London County Council 7.8, Liverpool country samples 3.1, Liverpool town samples 3.9, Manchester 10.6, Newcastle-upon-Tyne 3.7, Salford 8.3. Very great care is taken in collection so that the sample represents a mixture of all the cows in milk on the farm. The results show unmistakably that the percentage of cows in Somerset, and our samples come from all over the County, suffering from tuberculosis of such a stage that tubercle bacilli pass into the milk supply (this practically means tuberculosis of the udder) is a very low one and evidently lower than in other parts of the country. It does not of necessity follow that there is less tuberculosis amongst dairy stock in Somerset, as shown by the percentage of cows which give a positive reaction to tuberculin (*reactors*), but the proportion which go on to the production of udder tuberculosis or advanced tuberculosis is low. This is very satisfactory.

In addition to these cases, reports on milk derived from Somerset, but found to be tuberculous by outside authorities, have been received in 2 cases, one being from Bristol and one from London. In connection with the 8 cases found to contain tubercle bacilli, the findings were as follows:—on five farms 6 cows suffering from udder tuberculosis and 1 cow with considerable tuberculosis lesions and with tubercle bacilli in her milk, were detected and destroyed. A cow with udder tuberculosis was found on every one of these five farms. In the other 3 instances, in spite of detailed examinations and re-investigations, the cow affecting the milk supply could not be traced.

Tuberculosis in cattle is mainly being dealt with under the Tuberculosis Order, 1925. This Order aims at eliminating the most dangerous types of tuberculous bovines. It should get rid of cows suffering from tuberculous udders. As worked during the year it was doing little more than eliminate advanced cases of tuberculosis, many of which are only notified a short stage before their passage to the knackers and when all the harm they are likely to do as regards infecting the rest of the herd has been done. Very few primary cases of udder tuberculosis are being detected.

The figures for the 503 cases reported to the end of 1928 are:—

Classed as "advanced" tuberculosis .....	269
Classed as "not-advanced" tuberculosis .....	201
Classed as udder tuberculosis (entirely or mainly) .....	31
Classed as "not" tuberculosis .....	6

*Graded Milks.* The number of producers supplying graded milks slightly decreased during 1928. The following shows the figures at the end of the years referred to.

	1924.	1925.	1926.	1927.	1928
Certified Milk .....	1	4	3	6	4
Grade A (tuberculin tested) .....	1	5	7	9	8
Grade A. ....	2	4	6	11	12



C. **Administration of the Sale of Foods and Drugs Acts.** During the year 1,072 samples were examined. Of these, 17 were submitted by private individuals and firms, and 12 were "Appeal to cow" samples. The following Table shows the nature of the 1,043 samples submitted by the police, excluding the 12 "appeal to cow" samples.

TABLE XXIX.

Article.	Number examined.	Number genuine.	Number suspicious.	Number adulterated.	Per cent. adulterated.
Dairy Products —Milk .....	524	496	8	20	3.8
Cream .....	13	13	0	0	0
Cheese .....	10	10	0	0	0
Butter .....	51	51	0	0	0
Condensed Milk .....	19	19	0	0	0
Dried Milk .....	15	15	0	0	0
Milk Food .....	1	1	0	0	0
Edible Fats .....	22	22	0	0	0
Cereals .....	22	21	0	1	4.5
Meat and Fish Products .....	38	38	0	0	0
Tea, Coffee, Cocoa .....	24	24	0	0	0
Condiments .....	29	27	0	2	6.9
Saccharine Products .....	23	23	0	0	0
Miscellaneous Groceries .....	87	87	0	0	0
Beer, Spirits and Wine .....	96	95	0	1	1.0
Drugs .....	54	53	0	1	1.9
Imported Apples .....	15	15	0	0	0
<b>Total</b>	<b>1,043</b>	<b>1,010</b>	<b>8</b>	<b>25</b>	<b>2.4</b>

The samples adulterated, as shown in the Table, were mostly milk, the adulteration of other products being very few. 20 milk samples were reported as adulterated. No legal proceedings were taken in 7, four were dismissed, while in the remaining 9 convictions were obtained. The legal position as regards chemical milk adulteration remains very unsatisfactory.

TABLE XXX.

The number of samples analysed and the number adulterated during the past 8 years.

	Year.	Number examined.	Number adulterated.	Percentage adulterated.
Somerset .....	1921	1,084	67	6.2
" .....	1922	1,075	50	4.65
" .....	1923	1,049	40	3.8
" .....	1924	1,045	48	4.6
" .....	1925	1,142	37	3.5
" .....	1926	1,044	29	2.8
" .....	1927	1,067	39	3.6
" .....	1928	1,043	25	2.4
England and Wales .....	1927	124,264	6,826	5.5

### PUBLIC HEALTH LABORATORY.

The Laboratory continues to be extensively made use of by the different Local Authorities for the examination of water supplies, sewage samples, diagnosis of infectious cases, etc. It is also very valuable in connection with Tuberculosis, School Work, Venereal Diseases and other work directly under the County Council.

During the past year 10,574 samples have been examined (excluding all food and drug samples) as follows :—

Drinking Water—				
Bacteriological examinations	.....	.....	.....	738
Chemical analysis	.....	.....	.....	27
Sewage, sewage effluents, rivers and streams	.....	.....	.....	38
Swabs for diphtheria bacilli	.....	.....	.....	6010
Sputum for tubercle bacilli	.....	.....	.....	1669
Blood for typhoid, paratyphoid, etc.	.....	.....	.....	96
Hairs and skin for ringworm	.....	.....	.....	472
Specimens for Venereal Disease	.....	.....	.....	743
Urine for tubercle bacilli, B. coli, sugar, albumin, casts, etc.	.....	.....	.....	139
Faeces for typhoid and dysentery	.....	.....	.....	23
Milk for tubercle bacilli	.....	.....	.....	391
Milk for bacteriological examination (general)	.....	.....	.....	55
Milk Grade A, Grade A (T.T.), etc.	.....	.....	.....	87
Cerebro-spinal fluid and Post-nasal swabs	.....	.....	.....	11
Other specimens	.....	.....	.....	75
Total				10,574

Of the 6,010 swabs examined, 942 showed the presence of diphtheria bacilli ; of the 1,669 specimens of sputum, 454 contained tubercle bacilli ; of the 96 specimens of blood, 30 gave a positive Widal reaction ; of the 472 specimens of hair, 211 contained ringworm fungi ; and of the 743 specimens for venereal disease, 95 contained gonococci.

TABLE A.

## Causes of, and Ages at Death during the Year 1928.

CAUSES OF DEATH.	NETT DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.								
	All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and up-wards.
Enteric Fever .....	6	0	0	0	2	1	0	1	2
Small-pox .....	0	0	0	0	0	0	0	0	0
Measles .....	36	8	10	11	6	0	1	0	0
Scarlet Fever .....	5	0	1	0	2	1	0	0	1
Whooping Cough .....	17	11	4	1	0	0	0	0	1
Diphtheria and Croup .....	21	1	0	6	13	0	1	0	0
Influenza .....	83	2	1	1	2	1	12	18	46
Encephalitis Lethargica .....	9	0	0	0	0	1	1	3	4
Meningococcal Meningitis .....	3	0	1	0	1	1	0	0	0
Tuberculosis of respiratory system .....	259	1	0	1	4	54	121	61	17
Other Tuberculous Diseases .....	46	3	3	3	10	6	9	9	3
Cancer, Malignant Disease .....	674	0	0	0	2	2	46	251	373
Rheumatic Fever .....	12	0	0	0	3	5	2	1	1
Diabetes .....	61	0	0	0	3	1	3	13	41
Cerebral Haemorrhage, etc. ....	281	0	0	0	0	1	5	53	222
Heart Diseases .....	875	0	1	0	3	8	28	220	615
Arterio-sclerosis .....	239	0	0	0	0	0	6	33	200
Bronchitis .....	222	7	7	1	1	1	6	18	181
Pneumonia (all forms) .....	188	25	12	7	6	8	21	48	61
Other Respiratory Diseases .....	48	1	1	1	0	0	7	14	24
Ulcer of Stomach or Duodenum .....	47	0	0	0	1	0	7	24	15
Diarrhoea, etc. ....	59	32	6	0	3	1	3	2	12
Appendicitis and Typhilitis .....	32	0	1	4	5	5	2	9	6
Cirrhosis of Liver .....	30	0	0	0	0	0	1	23	6
Acute and Chronic Nephritis .....	211	1	1	1	3	8	13	72	112
Puerperal Sepsis .....	14	0	0	0	0	4	10	0	0
Other Accidents and Diseases of Pregnancy and Parturition .....	12	0	0	0	0	3	9	0	0
Congenital Debility and Malforma- tion, including Premature Birth .....	121	118	0	0	1	0	2	0	0
Suicides .....	56	0	0	0	0	3	13	25	15
Other Deaths from Violence .....	152	3	2	5	12	17	37	36	40
Other Defined Diseases .....	991	55	8	7	23	26	60	182	630
Diseases ill-defined or unknown .....	2	1	0	0	0	0	0	0	1
	4812	269	59	49	106	158	426	1116	2629





## Causes of Death at all Ages in each District during the Year 1928.

## RURAL DISTRICTS.

## URBAN DISTRICTS.

CAUSES OF DEATH.	AXBRIDGE.	BATH.	BRIDGWATER.	CHARD.	CLUTTON.	DULVERTON.	FROME.	KEYNSHAM.	LANGPORT.	LONG ASHTON.	SHEPTON MALLET.	TAUNTON.	WELLINGTON.	WELLS.	WILLITON.	WINCANTON.	YEovil.	TOTAL RURAL DISTRICTS	BRIDGWATER.	BURNHAM.	CHARD.	CLEVEDON.	CREWKERNE.	FROME.	GLASTONBURY.	HIGHBRIDGE.	ILMINSTER.	MIDSOMER NORTON.	MINEHEAD.	PORTISHEAD.	RADSTOCK.	SHEPTON MALLET.	STREET.	TAUNTON.	WATCHET.	WELLINGTON.	WELLS.	WESTON-SUPER-MARE.	WIVELISCOMBE.	YEovil.	TOTAL URBAN DISTRICTS	COUNTY TOTAL.
Enteric Fever .....	1	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	6
Small Pox .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles .....	1	2	0	0	2	0	2	1	1	4	0	1	0	1	3	3	0	21	0	0	0	2	1	0	0	0	0	0	0	1	1	0	0	3	0	2	0	1	0	4	15	36
Scarlet Fever .....	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	5	
Whooping Cough .....	0	0	1	0	0	0	0	1	0	0	0	0	0	1	2	1	0	6	0	0	0	0	0	0	0	1	0	0	2	0	0	1	1	3	0	0	0	0	3	11	17	
Diphtheria .....	1	1	1	0	0	0	0	1	0	0	0	2	2	0	0	2	2	12	1	0	0	0	0	0	0	0	1	1	0	0	1	0	1	1	0	0	0	3	0	0	9	21
Influenza .....	6	1	7	6	1	1	3	2	3	1	2	4	3	4	0	3	2	49	0	2	2	0	0	1	3	1	0	2	2	1	1	1	2	8	0	0	1	2	1	4	34	83
Encephalitis Lethargica .....	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	3	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	3	6	9	
Meningococcal Meningitis .....	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	3	
Tuberculosis of respiratory system	16	6	13	7	7	5	3	2	14	10	2	11	4	7	14	7	11	139	17	1	2	3	3	8	1	2	2	2	4	7	0	4	3	19	5	3	0	25	0	9	120	259
Other Tuberculous Diseases .....	1	1	2	0	0	2	0	4	0	1	0	2	1	0	2	2	1	19	2	1	1	0	0	1	1	0	1	0	4	1	1	0	0	3	0	1	6	0	4	27	46	
Cancer, Malignant Disease .....	35	15	34	14	27	4	17	20	24	31	15	32	21	13	22	19	36	379	26	14	8	12	4	26	11	3	6	10	13	5	4	9	7	54	2	16	8	41	3	13	295	674
Rheumatic Fever .....	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	6	12
Diabetes .....	4	4	1	3	3	0	3	2	5	4	1	0	0	0	2	4	6	42	2	1	0	1	1	2	0	0	0	3	1	0	0	0	5	0	1	0	1	0	1	19	61	
Cerebral Haemorrhage, etc. ....	17	7	14	6	11	2	6	10	14	8	4	16	7	3	12	10	11	158	8	6	4	4	3	6	3	2	4	3	0	1	2	2	3	15	4	6	3	26	0	18	123	281
Heart Disease .....	49	34	53	28	32	11	22	23	31	22	30	33	14	27	31	27	44	511	39	19	6	14	8	39	11	10	7	15	5	8	11	5	15	30	4	9	17	53	0	39	364	875
Arterio-sclerosis .....	18	11	16	3	12	2	3	5	0	12	4	4	4	12	6	13	3	128	10	5	2	8	1	6	3	0	2	7	8	6	1	1	2	21	1	1	3	15	0	8	111	239
Bronchitis .....	9	12	10	6	13	7	3	4	7	6	2	7	5	3	10	16	12	132	12	4	3	1	1	3	0	1	3	5	1	2	3	2	1	17	1	10	4	9	0	7	90	222
Pneumonia (all forms) .....	11	6	8	3	11	3	6	8	11	8	4	8	2	6	4	6	1	106	15	4	1	3	0	12	1	2	3	5	1	1	0	0	1	8	1	2	5	11	1	5	82	188
Other Respiratory Diseases .....	1	2	2	2	0	1	1	1	1	5	1	4	2	1	1	0	3	29	3	0	1	1	0	2	0	0	0	1	0	0	3	1	0	4	0	0	1	2	0	0	19	48
Ulcer of Stomach or Duodenum .....	2	1	3	0	2	1	1	0	1	2	0	1	0	0	1	1	4	20	3	0	1	1	0	2	0	0	0	1	0	3	0	0	5	1	0	0	4	0	6	27	47	
Diarrhoea, etc. (under 2 years) .....	8	1	1	2	1	0	1	1	1	0	3	0	0	1	2	0	0	22	1	2	0	1	1	0	0	0	0	1	0	1	1	0	1	5	0	0	0	2	0	0	16	38
Appendicitis and Typhilitis .....	1	0	3	0	2	0	2	3	2	3	0	1	1	0	0	1	0	19	2	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	8	0	0	13	32
Cirrhosis of Liver .....	3	0	2	1	1	0	0	0	0	3	1	1	1	0	1	2	0	16	2	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	4	1	4	14	30
Acute and Chronic Nephritis .....	16	8	7	5	4	1	4	7	17	11	4	10	0	1	5	9	7	116	8	2	0	6	1	7	1	1	1	6	1	0	3	4	4	18	0	4	7	18	2	1	95	211
Puerperal Sepsis .....	2	1	0	0	0	1	0	0	0	1	0	2	0	0	0	1	1	9	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	5	14	
Other accidents and diseases of pregnancy and parturition .....	1	0	1	2	0	0	1	0	0	1	0	0	0	0	1	0	1	8	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	4	12
Congenital Debility and malformation, premature birth .....	6	3	8	5	4	3	5	4	1	5	1	6	0	4	4	8	7	74	4	2	0	1	1	3	1	2	0	1	4	3	1	0	1	10	0	2	2	3	1	5	47	121
Suicides .....	1	1	5	1	2	0	2	1	2	4	3	1	2	1	0	3	2	31	2	1	0	1	2	2	1	0	1	0	0	0	1	3	1	2	1	1	0	2	1	3	25	56
Other deaths from violence .....	11	5	11	6	10	0	4	6	6	11	4	5	2	3	2	8	4	98	3	2	0	1	1	1	2	4	2	3	3	1	1	2	1	10	1	0	2	9	2	3	54	152
Other defined diseases .....	80	24	44	28	30	13	40	20	38	40	18	40	18	21	31	44	63	592	43	15	15	13	12	35	4	2	5	8	13	9	10	15	12	62	3	26	10	76	3	29	420	1012
Causes ill-defined or unknown .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	2
All causes .....	303	146	250	130	178	56	130	127	180	194	99	191	89	109	159	190	223	2754	203	82	47	73	40	158	44	30	38	74	63	50	46	55	58	308	24	83	66	327	15	174	2058	4812

